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PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

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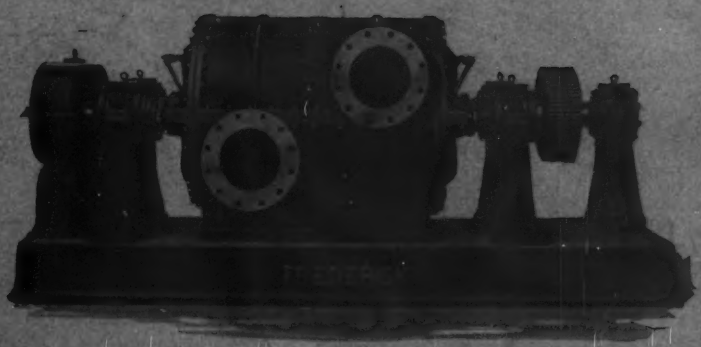

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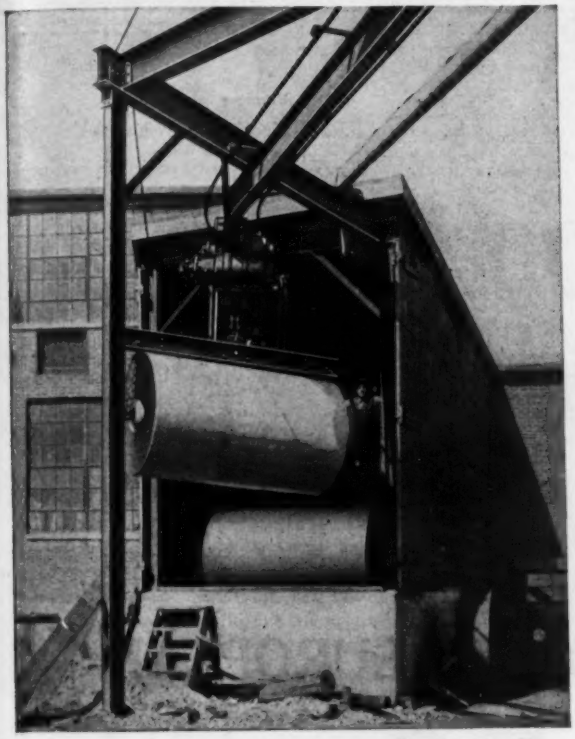

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ESTABLISHED IN 1872

PAPER TRADE JOURNAL

Vol. LXXVII. No. 11 NEW YORK AND CHICAGO Thursday, September 13, 1923

VALLEY PAPER CO. ORGANIZED IN KALAMAZOO

New Company for the Manufacture of Paper is Capitalized at $500,000 and Has George O. Comfort as Its President — Modern One Machine Mill Will Be Erected and Will Start Operation in the Near Future —Edwin H. Hacking, Abraham Vanderburg and Other Well Known Paper Men Are Officers of the Company—High Speed Machine of Latest Type to be Installed.

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., Sept. 10, 1923.—Valley Paper Company, capital stock, $500,000, Kalamazoo's tenth corporation engaged in the manufacture of paper, was organized Saturday morning and the announcement made that the erection of a modern one machine mill will start in the immediate future.

George O. Comfort, widely known in the paper industry, is president of the concern; Charles A. Blaney was elected vice president and Edwin H. Hacking, secretary and treasurer. The board of directors will include: George O. Comfort, Charles A. Blaney, Edwin H. Hacking, Henry Vanderhorst, E. S. Rankin, M. C. J. Billingham and Abraham Vanderburg.

Promoted by Mr. Comfort

Mr. Comfort came to Kalamazoo about two or three weeks ago, from East Camden, Canada, where he has been operating a small tissue mill. He was formerly president of the Monarch Paper company and had little trouble in interesting local capital in the new enterprise.

"We will erect a one machine mill," said Mr. Comfort, "installing a high speed machine of the latest type and suitable for the manufacture of high grades of book paper. We intend to look carefully into the matter of equipment before making purchases for the new mill, intending to make the mill highly efficient in every way and economical from the standpoint of operation."

Mr. Comfort left Saturday night for the east. It is understood he intends to close up his affairs there as soon as possible and then return to this city and superintend the erection of the new plant.

Hacking Well Known in Kalamazoo

Mr. Hacking is well known in Kalamazoo valley paper circles, being with John F. King when Mr. King organized the Rex Paper company.

Abraham Vanderburg is a practical papermaker of many years experience. He will be general superintendent of the Valley Paper company. He has held similar positions in Kalamazoo, Berlin, N. H., and Elkhart, Ind.

Purchasing Agents Meet

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., Sept. 11, 1923.—The fall "paper meeting" of the Western Massachusetts Purchasing Agents Association was held Saturday. The association once a year holds a "paper" meeting and outing. This year the delegates, who numbered about 40, visited the plant of the Chemical Paper Manufacturing Company. Following this the party took cars for Mt. Tom where a banquet was given, covers being laid for about 60. H. W. Carey, President of the Association and head of the Standard Time Clock Company of Springfield, presided. There were a number of members and officials of the National Purchasing Agents Association present including Russell Forbes of New York City, secretary of the Commodity Research Work of that organization; A. G. Evans, purchasing agent for the Chase Metal Works of Waterbury, Conn.; A. V. Holland of the Tileston and Hollingsworth Company of Boston; S. E. Howe of Rochester, N. Y., and W. L. Dodge of the Forbes Lithograph Company of Boston.

The principal speaker was Col. B. A. Franklin of the Strathmore Paper Company of Mitteneague and Woronoco whose topic was "The Psychology of Salesmanship." Prizes were drawn of handsome boxes of papetrie, the winners being J. Pauly and A. P. Brennan of the Bosch Magneto Company of Springfield, E. C. Tucker of the Chemical Paper Manufacturing Company and George Webster of the Whitmore Manufacturing Company.

Paper Men Aid Japanese

Prompt action was taken by the Paper Merchants of the City of New York in organizing a committee to solicit contributions toward the relief of the sufferers in the appalling Japanese earthquake disaster of September 1. The committee was formed on Tuesday, September 4, and an appeal was immediately sent out to the paper merchants of the city. By September 7, $600 had been received and was immediately placed in the hands of the American Red Cross. Further contributions have brought the total to $1,483.50 all of which has been forwarded to the Red Cross.

Following is a list of the contributors:

Richard Bauer, Henry F. Fulling Company, Inc., George W. Millar Company, Inc., Charles W. Ballard, Eastman Paper Company, Box Board and Lining Company, Harper Paper Company, American Paper Mills Corp., F. W. Anderson & Company, John F. Sarle Company (and Employees), M. and F. Schlosser, Miller & Wright, Lasher & Lathrop, F. A. Flinn, Inc. (and Employees), Beekman Paper and Card Company, Union Card and Paper Company, J. E. Linde Paper Company, S. M. Gladwin & Company, Richardson Bros., The Seymour Company, R. C. Kastner Paper Company, Paul E. Vernon & Company, Gilbert Paper Company, Wilkinson Bros. & Company, Milton Paper Company, Henry Lindenmeyr & Sons, Whiting-Patterson Company, Inc., Urquhart Paper Company, Skinner & Company, Keith Products Company, Inc., Charles F. Hubbs & Company (and Employees), Forest Paper Company, Inc., A. W. Pohlman Paper Company, Inc., Manhattan Card and Paper Company, Inc., Merriam Paper Company.

Further contributions from the members of the trade are hoped for and solicited.

The members of the Paper Merchants Committee for Japanese Relief are: Nicholas J. Barrett, Joseph F. McCormick, Paul E. Vernon and George McKinney, Treasurer.

CHICAGO MARKET INCLINES TO BRISKER TENDENCIES

Paper Trade Responds to Improved Tone as September Progresses—National Container Association Preparing for Its Next Session on September 25 and 26—George K. Gibson Back from Tour of West Enthusiastic Regarding Conditions Found There—Chicago to Welcome National Paper Trade Association on October 9—Personal Mention and Paper Trade Activities.

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, Ill., September 11, 1923.—Judging by the number of inquiries and even orders to start off the month, September business will run strong. The immediate response to any inquiry regarding conditions is almost without exception cheerful and indicative of a bigger volume than any of the past several years. Stocks have not been kept up during the summer in the merchants warehouses and to fill out the various lines to meet the requirements of their respective fields will mean a spell of lively buying.

Wrapping Paper Market Stronger

The wrapping paper field shows improvement in market conditions. Within the past few weeks a decided change has taken place. Orders are coming in regularly. S. G. Barton, president of the Barton-Hobart Paper Company, explains the present situation like this:

"Wrapping paper is going good. There is not much change in prices but they are getting firmer. Occasionally a special offer is made by some mill but it is only on special items. The outlook is good also and we contemplate a busy season just ahead."

Wall Paper Picking Up

Continuing about wall paper, Mr. Barton says: "Wall paper is just beginning to pick up for the fall. The rush is just starting now. It runs more or less all the year but, at the opening of September, new designs are being run off. These are for the spring trade next year but we get ready for it as early as this. There will be a heavy market for it during the next several months."

Fine and Coated Papers Brisk

The turning of September and as early as the last week in August, fine and coated papers witnessed a healthy demand. Printing houses began humming again which reflected promptly upon the paper industry. Business houses are getting out their circulars and catalogs, the circulars especially being put up on coated stock. The book publishers get under way in September and this demand is becoming stronger daily.

Long before any other branch of the paper industry took on any appearance of a quickened activity, the old paper stock market became firm, the demand stronger and prices went up slightly. It is now slightly better than it was during the past few weeks. September quotations are being prepared by old paper houses and the revisions tend upward.

Container Association to Meet

Secretary Tamlin, of the National Container Association, from his office in the Transportation Buildings, gives out the following announcement regarding the next session of the association:

"The next meeting of the National Container Association will be held at the Drake Hotel, Chicago, on September 25 and 26, preceded by a meeting of the Executive Committee only on the afternoon of September 24. The meeting was originally set for September 18, 19 and 20, but on account of the fact that a number of members could not be present on those dates, President Kress decided it would be best to hold the meeting on Monday, Tuesday and Wednesday of the following week.

"From the number of reservations that had been requested for the original meeting dates, it is anticipated that there will be a large attendance, which, of course, adds to the interest and value of those meetings. Many important matters will be on the program for consideration, among them being recent classification questions, report of progress in statistical work, forecast of business conditions, etc. Prominent speakers will address the members following the luncheons on each day of the meeting. Reservations should be made early."

George K. Gibson Reports West Busy

George K. Gibson, Chicago sales manager for the Wausau Sulphate Fiber Company, has returned from an extended trip through the west. While out on the coast, and, in fact, all the way back, Mr. Gibson made a survey of business conditions particularly as they referred to the paper industry. In commenting upon his findings, he says:

"Los Angeles business is booming due to the rapid growth of every line of business there. Not only is Los Angeles itself booming, but the entire territory surrounding it. The fruit crop is immense and immigration is running 37 per cent greater than the previous year. Tourists were coming at the rate of 5,000 a day and fully ten per cent of them were preparing to settle down. Coming back I stopped at Salt Lake City, Utah, where business has been good. From there all the way in to Chicago business conditions were a little quiet due to the fact that everybody was harvesting."

Mr. Gibson is a student of business trends and tendencies continually. He has closely watched every branch of industry which might in any way reflect upon the paper trade. In supporting his predictions for a busy fall and winter season, he states:

"The outlook for business is for a large volume. The agricultural situation is the best since 1919 and 1920. Prices on all agricultural and farm products are higher than a year ago, notably corn, which is up 22 to 25 cents a bushel. We have almost a three billion bushel crop. A very large crop of oats is on the average of 20 per cent higher than a year ago. The wheat crop is not so large as last year but the prices are higher, notably in spring wheat district, where last night the September wheat in Minneapolis closed at 14 cents a bushel higher than last year so the Minnesota, North Dakota and South Dakota farmers have an indicated up-turn in price on that wheat.

"The consumption of paper is going on at a heavy rate and at the expense of stocks. Merchants and consumers of paper have been hesitating in the placement of their fall orders because they wish to see how the crops turn out. Crop statistics are now becoming available, the price of all commodities are down to a purchase basis, there is plenty of money in the country to buy them and we are facing a fall and winter business of large proportions. We will do as much business this fall as any previous one with the probability that we will exceed anything we have known heretofore.

"To sum it all up I would say that with enormous crops at profitable prices, money plentiful, credit most abundant, interest low, wages high, everybody working, standard of living in America the highest in the world, the purchasing power of the American people the greatest on earth and with no weakness in any fundamental factor in agriculture, commerce, industry or finance, we must have good business as a consequence."

National Paper Trade Meets at Chicago

The semi-annual meeting of the National Paper Trade Association will be held at the Drake Hotel, Tuesday, October 9.

A meeting of the Middle States Wrapping Paper Association was held at the Congress Hotel today.

The next meeting of the Central States Paper Trade Association is scheduled for Tuesday, September 25, at Pittsburgh, Pa.

Desiring more advantageous quarters which would permit them to handle their business with more ease and dispatch, Fibre-Making-Processes, Incorporated, has moved from the seventeenth floor of the Tower Building to the London Guarantee and Accident Building, 360 North Michigan Boulevard, adjacent to Chicago's famous boulevard link bridge and across the river from one of its show places—the Wrigley Building.

Making Paper Boxes Under Modern Methods

Evolution from a small organization, feeling its way in the manufacture and distribution of made-up paper boxes, to a large and growing establishment manufacturing boxes for leading consumers throughout the country, has been the accomplishment of the Illinois Paper Box Company, 1323-1333 Carroll Avenue, Chicago, during the twenty-six years of its history.

The business was started by its president, H. A. Crofts, and A. H. Reed as a co-partnership in 1897. Neither partner had previously been engaged in the paper box business, nor were they familiar with its details. Working hours necessarily were long, credit connections had to be established for the new firm and the technical knowledge of the business was acquired by actual experience.

The same management continued until 1914, when the failing health of Mr. Reed required Mr. Crofts to carry on the business alone until 1919, when his son, H. C. Crofts, now secretary of the organization, and M. L. Twomley, vice president and general manager, entered the business and re-organization took place. Since then, as before, the business has made a substantial steady growth and today occupies more than 75,000 square feet of floor space. The plant is now equipped with the latest and most modern paper box manufacturing machinery and the boxes produced by automatic or semi-automatic machinery are much superior to the boxes which are largely hand made.

The company specializes on individualistic packages designed to meet particular customers' requirements. The services of an excellent art department are rendered its customers as part of the service offered.

Chicago Paper Trade Aiding Japanese

The Wrapping Paper Association of Chicago was one of the first contributors to the Japanese fund, contributing $1,000 as soon as the names of collectors were announced. The paper trade, combined with the printers, publishers, photographers and kindred lines have organized, under the leadership of Reuben H. Donnelley, 625 South State Street, for the purpose of raising $15,000 as its quota of the half million dollars Chicago is trying to raise in a few days time.

Activities of the Paper Trade

Colter Rule, of Dwight Bros. Paper Company, has returned from his vacations, a portion of which was spent in Cincinnati, Ohio, with relatives and friends.

Eugene Abell, of the Chicago Paper Company, is away on his vacation and will be back shortly.

B. M. Anderson, of the Ben Franklin Paper Company, has gone on a month's automobile trip into Minnesota and Wisconsin with his family.

It is reported that the Eckstein Mally Paper Company has been incorporated with a capital of $19,000 to do business at 1529 N. Halstead street, Chicago. The concern will deal in paper and paper products, grocers' specialties, etc. The incorporators are: George A. Mally, Morris Eckstein and Harry S. Eckstein. Correspondent, Robert L. Huttner, 10 N. Clark street.

Chicago Concern Under New Name

CHICAGO, Ill., September 12, 1923.—The Uncas Paper Company is now located at 1530 Newberry avenue, this city, under the name of The Commonwealth Paper Company, Inc.

David T. Neely Returns to Whitaker

After an absence of six months, David T. Neely has returned to The Whitaker Paper Co. He is now in charge of new offices at 118 St. Clair avenue, East, Cleveland, Ohio, and will operate from Whitaker's Detroit Division.

Mr. Neely's conspicuous success as a paper salesman is unique. Until he was past 40 years of age, he was in another business. Six years ago he was pastor of the Knox Presbyterian Church in Cincinnati. His health demanded a change of activity and he joined forces with the Whitaker Paper Co.

DAVID T. NEELY

After a preliminary training of several months, he went on the road with Western Ohio as his territory and his success was immediate. He substantially increased the company's business in that section.

Three years ago he was given charge of the Cleveland office where he remained until he left the company six months ago. He is a graduate of Princeton Theological School.

Boston Paper Trade News

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., September 10, 1923.—James Richard Carter, well known throughout the United States in the paper trade business, is seriously ill at his summer home at Jefferson Highlands, N. H. It was learned today that Mr. Carter, who is 74 years of age, has been ill for the past six weeks. Besides being treasurer of the Carter, Rice & Company Corporation of Boston, Mr. Carter is also president of the Nashua Gummed & Coated Paper Company of Nashua, N. H.; president of the Carso Paper Company, Dansville, N. Y., and president of Carter, Rice & Carpenter Paper Company. He is also treasurer of Carter's Ink Company of Cambridge, Mass.

Leon M. Poore, office manager of Stone & Andrew, Inc., Pearl street, this city, is enjoying his annual vacation traveling in New York.

Benjamin Greenspoon, of Chelsea, Mass., burlap bag dealer, recently filed a voluntary petition in bankruptcy in the federal court here; he admitting liabilities of $9,216 and no assets.

CARLISLE ANSWERS ATTACK ON RIVER CONTROL PLAN

President of Northern New York Utilities, Inc., Defends Plan to Create Regulating District on Racquette River—Says Propaganda Spreaders Would Place Private Monopoly Above Public Welfare—Floyd L. Carlisle Inspects Building Projects of St. Regis Paper Co.—Jeremiah T. Carey, President of International Brotherhood of Paper Makers Calls on Speaker Machold.

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., Sept. 10, 1923.—"It is simply propaganda to perpetuate private monopoly to the detriment of the public welfare," said John N. Carlisle, president of the Northern New York Utilities, Inc., and a member of the Board of the Black River Regulating District, when asked his sentiment regarding published attacks upon the proposition to create a river regulating district on the Racquette river.

The Publicity being spread points out that the "heart of the Adirondacks is menaced by the plan and that no public necessity for it exists." Mr. Carlisle said that J. E. Barker of Paterson, N. J., owns a 15,000 acre private park at the Oxbow where the public is excluded from hunting and fishing. That Mr. Stehr of Buffalo owns a 500 acre private preserve in the same locality. Both were purchased after plans for the Racquette river regulation district had been published. "If the reservoir were to be built at Oxbow it would flood 800 acres of the Barker property, 500 of which is a swamp. As a matter of fact it would eliminate a very unsanitary swamp and cover it with live water," said Mr. Carlisle.

"The case has already been presented to the Water Control Commission, and it looks to me as though Mr. Barker is now trying to influence the decision by the spread of propaganda in the papers," he said.

The opponents of the formation of the regulating district under proposed plans claim that summer resorts would be destroyed, the reservoir basins would be a nuisance because of the odors from lower levels, the United States veterans' bureau tuberculosis hospital near Tupper Lake would be reduced in curative efficiency and the state would get nothing for its valuable storage rights.

Says Plan Is Popular One

"The petition for the creation of the district was signed by every village along the river," said Mr. Carlisle. "Proof of necessity for the regulation of the river flow submitted at the hearing was undisputed. The chief menace indicated was floods. Potsdam and Norwood have suffered extensively by high water. In 1921 the state highway bridge at Hewittville was washed out. In 1913 buildings in Norwood were moved by the flood, the Post Office being moved 30 feet across the street. In Potsdam many buildings were surrounded with water in 1920. In 1921 logs piled against a bridge and the highway was flooded for half a mile near Raymondville, with the village inundated. In 1907 Tupper Lake village was flooded to the extent that it was necessary to use boats to reach the railroad station. In 1914 the dam at Hannawa Falls washed out. At Massena each year floods inundate sulphur springs and farms.

Danger of Low Water Periods

"On the other hand the low water periods each year cause much trouble in addition to the closing down of power wheels. At Potsdam a lack of water increases the fire hazard, the intake of the filtration system being partially uncovered. There was talk of not rebuilding the burned Normal school on this account. Tupper Lake has trouble with fire protection and its sewer drainage discharges on the bank of the river in low water. There is talk of cesspool facilities to remove this hazard to health.

Would Help Handicapped Industries

"The St. Lawrence Transmission Company, serving many communities and affording power to many industries, is handicapped to an extent seriously felt. The DeGrasse Paper Company, Racquette River Paper Company and Hanna Paper Company plants sustain great losses in production each summer through lack of water flow in the Racquette river.

"One very important feature just now is the fact that full regulation of the Racquette river would save a million tons of coal a year to that valley. The question of a reservoir at Oxbow is not up now, the only question now under consideration being the establishment of a regulating district."

Mr. Carlisle pointed out that the American Legion hospital authorities and the National Sanitarium people are now favorable to the project.

Looks Over St. Regis Projects

Floyd L. Carlisle, president of the St. Regis Paper Company, arrived in the city Friday morning and returned to New York in the evening.He made a personal trip of inspection of the two building projects now in progress at Deferiet, and this was said to be the purpose of his short trip North at this time. He would say nothing concerning the Oswego project.

The St. Regis Paper Company is now building a new wood grinding plant at Deferiet, and an auxiliary steam plant is also being installed. It was expected that the work would be completed by the middle of September, but a delay is now certain. It was in connection with this delay that Mr. Carlisle made the visit.

The new steam plant now under construction is designed to generate 5,000 kilowatts. This will be used at such times as low water conditions reduce power to a point where production is handicapped. The new wood grinding plant will greatly add to the capacity of that department. Both will be placed in commission this fall.

Carey Makes Regular Visit

Jeremiah T. Carey of Albany, president of the International Brotherhood of Paper Makers, arrived in this city Friday evening by automobile on his regular visit to this section. He said that he had no important mission beyond discussing conditions with members of the organization in the mills of Northern New York. He did not visit Deferiet or Carthage, but left Saturday afternoon for Norwood to call upon the locals of the Hanna Paper Corporation mills in St. Lawrence county.

Saturday morning Mr. Carey called at the office of Speaker H. E. Machold of the Assembly and passed considerable time in conference with the local legislative leader. When asked if there was some political matter that he was discussing, Mr. Carey said that there was none. "Our legislative program will not be decided upon until the annual meeting next February," he said.

Mr. Carey was asked concerning his prospects in the race for re-election as president of the Brotherhood. He said that nothing would be known about that until the middle of October, the voting being carried on by members during the first two weeks of that month.

Henry Gross of Deferiet and M. H. Parker of Albany, now vice-president of the organization, are candidates against Mr. Carey. It is considered probable that Mr. Gross will poll a heavy vote in this section of the state. Mr. Carey has served 18 years as head of the Brotherhood and has always been regarded as a very successful representative of his members in controversies.

Robert Stevens Makes Change

NEW HAVEN, Conn., Sept. 11, 1923.—Robert Stevens, formerly Superintendent of the National Folding Box Company of this city, has severed his connections with that mill to take charge of the old American Strawboard Company mill at Winchester, West Virginia, recently purchased by N. H. Carpenter, General Manager of the Coshocton Straw Paper Company, Coshocton, Ohio.

Nothing takes the place of Leather

Somebody is going to win

$2000

And more than 100 others will win good cash prizes

You folks who know Leather Belting ought to win many of them

for Letters about Leather!

Perhaps you have a story of a wonderful leather belt—one that has outlived the oldest employee—that is still transmitting power perfectly after years of service.

It may be that in your plant you have found that no belt is as efficient as a leather one—that nothing else has the same grip on a pulley!

Perhaps you have a leather belt that has been exposed to water, oil or some other unusual condition for days at a time without impairing its efficiency.

Your plant may require a water-proof belt and you have found that a leather one does the work best.

Out of your personal experience there are doubtless a score of incidents and observations that would make wonderful Letters about Leather. Put that information down. Send it in to the contest judges. Write more than one letter if you like.

Rules of the Contest

1—Letters must be written in the English language, and on only one side of the paper.

2—The competitor's name and address must be written at the top of the first page of the letter.

3—The letter must be mailed in a sealed, stamped envelope. *No post cards will be considered.*

4—There shall be no limits to the length a letter may be; and any competitor may send in as many letters as desired.

5—This Contest shall be freely open to anyone, anywhere.

6—The first prize will be awarded to the contestant whose letter on the subject, "Nothing Takes the Place of Leather," is the best in the opinion of the judges.

7—The Contest opens officially June 30, 1923, and closes October 31, 1923.

8—In case of tie, both or all tying contestants will receive the full amount of the prize tied for.

You, who know the practical side of leather belting—how it solves power transmission problems as nothing else will—should have your share of the $5000 in cash prizes that will be paid for the best Letters about Leather.

October 31st is the closing date of the contest. Get your letter in before then!!

The judges of the contest are to be

Martha E. Dodson
Associate Editor
The Ladies' Home Journal

President
Frederick C. Hicks
of the University of Cincinnati

President
Fraser M. Moffat
of the Tanners' Council

The cash prizes will be paid to the winners just as soon as the judges render their decision. The names of the winners will be announced in these columns as soon after October 31st as is practicable.

Write your Letter about Leather to-day!! Mail it to

Contest Judges

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The Committee believes that everyone who buys shoes, or belts, or other products of leather, will welcome these facts as a sound, safe guide to satisfactory buying.

PHILADELPHIA TRADE FAST ASSUMING VIGOR OF FALL

Week's Gain in Business Realizes Expectations of Optimistic, Gain in Coarse Paper Being Most Marked—Fine Paper Division Discusses Freight Rates but Takes No Action—Garrett-Buchanan Co. Reopens Rebuilt Structures—Rearrangements at Offices of Charles Beck Paper Co.—Allen E. Whiting Tells of European Trip—Paper Trade Golf Association Plans for Tournament.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., September 11, 1923.—A full week of post Labor Day experiences in paper distributing in this city, realized in both the fine and wrapping paper divisions, the expectations of the moderately optimistic for the increase of trading with a fall time vigor. Chief buyers of fine papers, the printers and publishers who, for months before September came, bitterly had been complaining of idle presses and slow moving composing room operations—although their orders were of larger size than would be the result of the depression they pictured in such black terms—evidenced during the week the first signs of optimism they had shown since quite early in the year. They talked with confidence of the future and they ordered accordingly. Their better business came largely through the receipt of "go ahead" orders on many jobs of price catalogues and direct by mail advertising campaign pieces which had been held up for weeks over the vacation period. As a consequence the fine paper trade experienced the largest improvement of the week in the buying of all grades of books and of half-tone news print papers. The market for bonds, writings and ledgers was a little bit better in actual orders.

Coarse Paper Market Picks Up

True to prophecy Labor Day marked the turning point from sluggishness to slight resumption of activities in Philadelphia textile districts. The mills there are far and wide the largest group consumers of all grades of Kraft and the better qualities of manilas, tissues and general wrapping papers. They re-entered the market during the week, not individually with large orders, but there were so many of them that they bulked up quite satisfactorily at the end of the first week of real business which the wrapping paper trade has done with the textile industry for several months. Its buyers were rather circumspect and did not commit themselves for far into the future. Buying for their present requirements and for so much of the holiday offerings as must now be marketed, constituted the gain of the week. As a consequence values for all the better grades of wrappings became firmer with, however, no increases and this in turn tended to steady the hitherto weak and uncertain prices on the cheaper grades of coarse papers.

More Orders for Paper Stock

Betterment in the paper stock business was quite in harmony with that in the other market. A few grades, notably Hard White, No. 2 Soft White, and No. 1 Old Manilas showed slight advances. The other grades, however, all hardened in price. The only criticism the packers had of the market was that it was most irregular and spotty, one day of quiet being succeeded by two or three of activities. There were occasional dips in mill prices but the recovery advanced the market just a trifle beyond what it previously had been and so, despite the very character of the demand, the trend unquestionably was upward.

Freight Rates Discussed

Very satisfactory conditions in the trade were pictured in the symposium on conditions at the meeting last week of the Fine Paper Division of the Philadelphia Paper Trade Association, which discussed for a long time but, without arriving at any conclusion, the broad subject of prepaid freights. So satisfactory was this first meeting of paper house executives since the summer vacation period set in, that it was agreed tentatively to hold a larger meeting and, in the evening, when the presence of all could be assured and in the pleasant atmosphere of the dinner table. Neither time nor place has been determined on but it probably will take place the week after next. President George W. Ward of the D. L. Ward Company, is ardently in favor of this gathering and opportunity may be made to present to the trade the general subject of the Philadelphia Sesqui Centennial and more particularly subscription to a $5,000,000 bond issue in whose interest Mr. Ward, as chairman of the Central City Group is giving much of his time.

Opens Rebuilt Structures

This week the Garrett-Buchanan Company reopens for business the doors of its properties, 16-18-20 S. 6th street, closed since the disastrous Palm Sunday afternoon fire which almost entirely destroyed the stock and did great damage to the building, resulting in loss of approximately $600,000. Save for the placing of an ornamental steel ceiling in the business offices in 18 and 20 S. 6th street, the restorations have duplicated the former appointments. Walls have been treated in colonial buff and ceilings and wood work in glossy white with desks and cabinets in mahogany. Meanwhile there is nearing completion the entirely new five-story brick and concrete warehouse and garage at 3 and 5 S. Marshall street, which will replace the double front three-story brick building of old time design which was the original home of the Garrett Buchanan Company. During the week there were laid the floors of the third, fourth and fifth floors. This week the first and second floors will be laid and then there will be torn out from the interior of the new building the last remains of the old one. Thus there will be completed a very unique success in building-construction of a modern fireproof warehouse virtually beginning at the roof and proceeding downward to the basement.

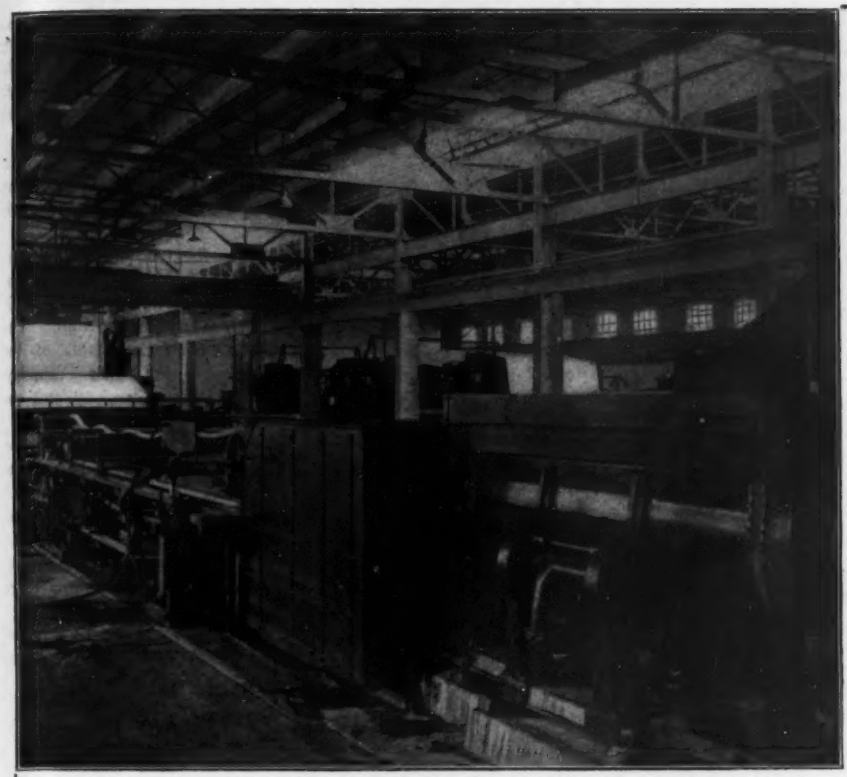
Rearrangements for Beck Co.

The Charles Beck Paper Company during the week also completed rearrangements which will add very largely to its show and stock rooms and will expedite deliveries. All of the stock and display lines of machinery of the Charles Beck Machine Company, hitherto carried on a large portion of the first floor rear of the paper company premises, have been removed together with the executive offices to the second floor, the offices of President Charles J. Beck and sales manager Henry Sherer being located in the place of those formerly occupied by sales and promotion manager Le Duc, now resigned. Under the rearrangements there is afforded to the Beck Paper Company a large expansion of shipping facilities rear with frontage on Ranstead street. It now occupies all of the first, fourth and fifth floors and basement, 609 Chestnut street, the Charles Beck Machine Company having its paper machinery shop on the third floor and its offices and samples on the second floor. L. Harry Rees of the Service Department returned to his desk last week after a seashore vacation. Charles J. Beck returned from a fortnight trip to Atlanta, Ga., and other Southern points. Gustaf P. Johnson of the sales force was married on September 4 at Curwensville, Pa., to Miss Wawa Constance McNaul, daughter of Mr. and Mrs. Al McNaul of Curwensville.

Allen E. Whiting Returns from Europe

After the expenditure of several millions of marks—however, only a moderate outlay of real money,—in Germany and a further combined business and pleasure trip to England, France and Switzerland, President Allen E. Whiting of the Whiting-Paterson Company returned on Thursday morning of last week to his office at 13th and Wood streets, finding assembled to greet him all the members of the sales organization and a room filled with flowers. In the course of his trip Mr. Whiting visited the representatives in

(*Continued on page 32*)



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BIRD SCREENS

5467

PHILADELPHIA TRADE VIGOR

(*Continued from page* 30)

London of a number of English paper manufacturers, establishing connections for high grade bond papers of which more definite announcement shortly is to be made and as well as the world-wide known paper specialty mill of the Keller-Dorian and Silvin Company in Lyons, France, for which the firm is the exclusive American distributor. In Germany visit was paid to three paper converting machinery establishments in the Hamburg district. Mr. Whiting expressed his surprise at the evidences of a prosperous condition which certainly existed on the surface in Germany. Mr. Whiting was accompanied on the larger portion of his tour abroad by Mrs. Whiting, who had preceded him across by several weeks in order to journey through Italy, and by their sons, Albert E. Whiting, Jr., a sophomore of Yale, John R. Whiting, and Willson Whiting. France he found a veritable beehive of industry, its population working almost without sleep in order to restore the damage done by war. Switzerland too was exceedingly prosperous and its wealthy classes seemed to have unlimited amounts of money to spend.

Plans for Fall Golf Tournament

Final arrangements have been completed for the annual fall tournament of the Philadelphia Paper Trade Golf Association which is to be held on the links of the Philadelphia Cricket Club, St. Martins, just outside Philadelphia on Tuesday and Wednesday, September 18 and 19, and invitations to participate are being sent out this week to members of the paper trade exclusively by the committee in charge consisting of Arthur D. Sherrill of Riegel & Co., chairman; J. L. N. Smythe of J. L. N. Smythe & Co., E. A. Weihenmayer of Jessup and Moore, Irwin Megargee of Curtis and Brother and Allen Whiting of the Whiting-Paterson Company. It is proposed to have the qualifying rounds on Tuesday morning, September 18. For the Kicker's handicap with eighteen hole medal play, players will select their own handicap by drawing at luncheon a blind number between seventy and eighty. The player making nearest to the number drawn will be the winner of the prize. On the afternoon of Tuesday there is to be match play in classes, all of these playing on handicap. Three-quarters of the difference in the handicaps will be allowed to be taken at the holes indicated on the scord card. Half strokes are to be counted as one. On Wednesday morning, September 19, there will be match playing in classes, the beaten fours to continue to play for the consolation prize and in the afternoon the final round for championship in all classes. Prizes will be awarded to the winner of the low net, winner of each eight and also the winner of the consolations. There will be no prize for the runner up. The rules of play permit two or four ball matches, the suggestion being made, however, that the qualifying round be played in foursome, due to the fact that the course is so laid out that it is necessary for everyone to start from number one tee. Trains on the Pennsylvania Railroad from Broad street station will leave for St. Martins at 8:06 A. M. and 8.24 A. M. daylight saving time.

Label and Box Men to Meet

KALAMAZOO, Mich., Sept. 10, 1923.—A joint conference of the Folding Mox Manufacturers National Association and the Label Manufacturers National Association will be held in Kalamazoo, October 17, 18 and 19. The fall meeting, always an important one in the annals of the two organizations, is held here on the invitation of John F. Byrne, president of the Folding Box Manufacturers National Association and general manager of the Standard Paper Company.

The box manufacturers association includes 49 concerns, while 31 label makers are enrolled in the latter organization. Mr. Byrne reports that he expects practically a 100 percent representation from both associations and has perfected plans for the proper entertainment of the visitors while in Kalamazoo.

"As a rule these conferences are devoted strictly to business," said Mr. Byrne, "but in Kalamazoo we intend to vary the procedure by certain entertainment features. Mill executives throughout the valley have been most cordial in their desire to co-operate in any way to make the gathering a success, thus demonstrating again the truth of the slogan 'In Kalamazoo We Do.'"

The New Burdick hotel has been selected as headquarters. All business meetings will be held in the hotel ball room. Wednesday afternoon there will be a meeting of the Label membership, followed by the Label directors session.

Thursday will a busy one. At 8.30 in the morning automobiles will leave the Burdick to visit the mills of the Bryand Paper Company and Allied Paper Mills. The Standard Paper Company will entertain both associations at luncheon in its dining hall. The afternoon will be devoted to an inspection of the plants of the Sutherland Paper Company, Western Board and Paper Company, Kalamazoo Paper Company, Hawthorne Paper Company and the Rex Paper Company.

Thursday evening the visitors will take dinner at the Kalamazoo Vegetable Parchment Company's community house. Julian Armstrong, Chicago, will speak on "The Paper Industries Exchange."

C. S. Campbell, president of the First National bank, Kalamazoo, will deliver an address on "The Fallacy of Selling Below Cost." Jacob Kindleberger, president of the Kalamazoo Vegetable Parchment Company, will talk on the "Harmony Club." In addition there will be an industrial film on papermaking and community singing.

Friday morning, the final day of the conference will be devoted to meetings of the Folding Box directors and the Folding Box membership.

Negotiating for Land Sale

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., Sept. 11, 1923.—When the American Writing Paper Company was organized in 1899, it took over not only the mill properties that formed it but also a large tract of land with 20 mill powers of indentured non-permanent power, presumably with the idea that sooner or later expansion would be necessary. In later years it found that such expansion was not needed and it tried to get the Holyoke Water Power Company to take the land and water powers back. In this it was unsuccesful under the old Water Power Company regime; but under the new regime, with Robert E. Barrett at the head and the new executive of the American Writing Paper Company, President S. L. Willson, conferences have been held and negotiations have progressed for the re-sale of that land and power back to the Water Power Company.

The proposition is rather involved and intricate but it includes an exchange of land between the American Company and the Water Power Company so that land will be given the American Company contiguous to its present holdings, and the Water Power Company will be in a position to sell anew the land formerly held by the American Company. In addition, the Company will buy part of its power now being sold it by the city from the Holyoke Water Power Company, the remainder probably being held to go with the land.

Discovering New Uses for Wood

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., September 10, 1923.—Chemical research is revealing new uses for wood that were not dreamed of a few years ago, declares the Forest Service, Department of Agriculture. One example given is that of the extended use of pulp wood not only for paper products but also for fiber containers, wallboard, and similar forms of material. Wood is already in use for the making of artificial silk, rope, carpets, and other fabrics.

Because of this great progress in the discovery of new uses for wood, the department declares it to be all the more necessary to treat the country's forests as crop lands rather than as timber mines with no thought of replacement.

"We can Speed up our Paper Machines —*without pitching the wire*"

"And what is more we feed the stock directly on to the wire at any speed we find necessary without the use of slices, and we are making, besides, a sheet of uniform thickness."

"It is all due to a new device that we installed a short time ago. It can be adjusted quickly and easily, and so accurate and fine are the adjustments that the sheet can be made uniform over its entire width. Our wires last longer, too, because we eliminated the slices that used to wear them down."

"The new device was easy to install. We put it right in, in combination with the flow box that we had on the machine. It is called the Voith High Pressure Stock Inlet."

This has been the experience of all manufacturers installing the new Voith Inlet. We will be glad to give you full information regarding it. A post card will bring an interesting illustrated pamphlet.

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Builders of Fourdrinier & Cylinder Paper Machines, Niagara and Holland Beaters, P. A. P. A. Rotary Pulp & Paper Screens, Wolf Chippers, Valley Wet Machines, and other high grade paper and pulp mill equipment.

MONTREAL INTERESTED IN REORGANIZED RIORDON CO.

Sir William Price and Archibald Fraser Will Probably be Members of Directorate—Another Large Timber Area to be Sold at Auction—Whalen Mills Install Oil-Burning System at Port Alice Plant—Belgo-Canadian Paper Co., Ltd., Increasing its Output—New France Lumber Co. Purchases Stenelin Timber Tract—Discussion Over Workman's Compensation Rates.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., September 11, 1923.—It is stated on good authority that the directorate of the reorganized Riordon Company will include Sir William Price, president of Price Bros. & Co., the well-known paper manufacturers of Quebec; Archibald Fraser, president of Fraser Companies, Limited, which is the largest lumber and pulp manufacturing concern in the Maritime Provinces, and George M. McKee, until recently general manager of the Donnacona Paper Company, of Dannacona, Que., and a past president of the Canadian Pulp and Paper Association. It is considered that in view of the great success which they have met with in the development of their own enterprises their collective experience should go far toward insuring the success of the reorganized Riordon Company.

Issues Booklet Dealing with Concern

In connection with the pending reorganization of the company, the Royal Securities Corporation of Montreal has mailed to shareholders a 16-page booklet dealing with the concern. This booklet shows photographs of the company's mills and timber limits and a graph illustrating the growth in Canada's exports of bleached sulphite, which have grown from 10,000 tons in 1917 to 150,000 in 1922. Accompanying the booklet, which is printed throughout on paper manufactured by the Ticonderoga Pulp and Paper Company (controlled by Riordon), from Riordon bleached sulphite pulp, are specimens of bond papers produced from Kipawa and Hawkesbury pulp together with a piece of knitted silk material manufactured from Kipawa wood pulp. To quote from the booklet: "Kipawa pulp is synonymous with the highest grade of bleached sulphite produced and is used extensively in the best grades of writing, bond, lithographing and other high-priced papers. Its unique characteristics have established it as a substitute material for cotton and silk, and large shipments are regularly made to artificial silk manufacturers.

The company's three mills in Canada are stated to have a capacity for the manufacture of 94,000 tons of bleached sulphite per annum, while the Ticonderoga Pulp and Paper Company's mills at Ticonderoga, New York, owned and controlled by the Riordon Company manufactures 11,000 tons of soda paper per annum and 17,000 tons of book paper, making a total capacity of 122,000 tons of pulp and paper per annum. The total capacity of the company's lumber mills in Canada is 90,000,000 ft. b.m. The timber holdings of the company in Canada total 9,638 square miles, while the water powers belonging to the company have an ultimate capacity of continuous horse power of 163,500. At present the developed capacity is 7,700 horse power.

Terms of Reorganization

Under the terms of the reorganization, it is stated that the existing capitalization of the company is to be reduced by some $25,000,000 and that $10,000,000 capital is to be raised to wipe out existing obligations, to finance an addition to the plant of the Kipawa Mills, and to provide ample working capital. It is understood that the present earning capital of the company is at the rate of $3,000,000 a year, which is amply sufficient to take care of all fixed charges and dividend requirements on the reorganization basis.

The present plans have been made possible through the co-operation of certain bondholders and creditors, whose claims aggregating $9,000,000 now rank ahead of the old preferred shareholders. These consented to accept in return for their present bonds and claims principally second preferred stock which will rank as junior to the prior preference stock that will be offered to the old preferred shareholders. The latter will be offered prior preference stock pro rata of their present holdings at a price which will include a bonus of the new common stock. It is understood the basis underlying the plan of reorganization calls for a minimum subscription from the shareholders of $2,000,000 on a total of $10,000,000 required. The contribution of the shareholders is expected, however, to exceed this amount by a considerable margin, not only because they must contribute in order to retain their present equity in the property, but also because the group of bondholders and creditors referred to before have been willing to forego prior claims and accept instead a junior security which they consider carries with it a reasonable equity for themselves. The shareholders of the old company, the Riordan Pulp and Paper Company, as well as the common shareholders of the Riordan Company, will be given the right to purchase the stock of the new company. The carrying out of the present plan will result in control of the company remaining in Canada, with its present shareholders.

Large Timber Area to be Marketed

The lease by auction of a large area of timber limits, located on the north shore, where surveying is now being carried out by hydroplane, for the account of the Lands and Forest Department, will take place late this fall. The intention of the Provincial Government is to develop that region and establish definitely there the pulp industry, which would help in giving the residents of that coast, in addition to fisheries, permanent means of earning their living. As far as Quebec is concerned, it was learned that the lease of these limits will be preliminary to the establishment of a lumber mill as forecast several months ago by Premier Taschereau. The exact location of the new mill has not yet been divulged, but it is stated that it will be one of the most important constructed in the province and will give employment to a large number of men. Coincident with this report, it is also reported in semi-official circles that a large pulp and paper mill is to be built early next spring in Chicoutimi and Lake St. John district.

Best Customer of Canada is States

On the report of the business ending July 31, 1923, the United States has again shown itself to be Canada's best customer, the value of domestic exports thereto having been $402,156,000 as compared with $386,061,000 to the United Kingdom. If exports of domestic products were added, the total would be increased by some $15,000,000. The reason why exports to the Republic are so large, and that in spite of the Fordney tariff, is because of the ever-increasing demand for lumber, pulp and paper, the value of these exports having been $214,517,000 as compared with $20,219,000 to the United Kingdom. Under the heading, agricultural and vegetable products, the showing stands $273,844,000 to the United Kingdom and $38,860,000 to the United States.

Whalen Pulp and Paper

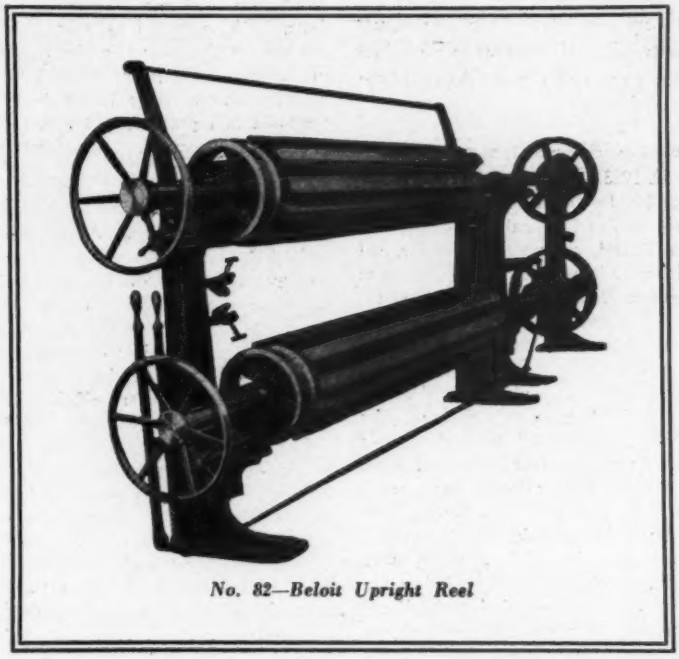
It is reported that the Whalen Pulp and Paper Mills, Limited, has completed installation of an oil-burning system at the Port Alice plant, so that the full scale production basis which has been maintained for the past year, will shortly be increased. It is expected that shareholders will be called upon soon to attend a special general meeting, although the purpose of this meeting has not yet been disclosed.

Belgo-Canadian Paper

Belgo-Canadian Paper Company, Limited, is setting new records under its reorganized management, and production is now re-

(*Continued on page* 38)

Beloit Safety-First Upright Reel



No. 82—Beloit Upright Reel

A STANDARD safety-first upright reel made to conform with strictest regulations of state laws as to clearance between drums, which rotate in opposite directions, making it impossible for a man to get drawn in between them. Spools are made either of wood bat construction or of cast iron, as preferred. Drums are made for end and side adjustment. They are equipped with frictions for use when unwinding. Also equipped with friction clutches for starting and stopping. Special attention given to lubrication of bearings, which are self-aligning. Well built throughout for steady service.

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TORONTO TRADE BRIGHTENS AS MORE ORDERS POUR IN

Active Demand Reported for Newsprint and Prices Rule Firm—Embargo Far Off if It Comes at All—Cut of Pulpwood Has Been Small and Labor Shortage Proves Inconvenient—Report of Spanish River Pulp and Paper Mills Shows Achievements of a Prosperous Year—Net Earnings are $646,618 in Excess of a Year Ago—Notes of The Industry.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, September 10, 1923.—Business in the paper line has shown some improvement, and orders have been more plentiful during the past few days. The Canadian National Exhibition, just closed, brought a large number of outside customers to the city, and the jobbers were busy entertaining callers, while all the salesmen were on hand to give them attention. Manufacturing stationers report considerable activity in their line and envelope producers, who have been rather quiet, have for the most part quite an influx of business.

News print is in active demand and prices rule firm. Whether there will be any price increase at the beginning of the new year is a matter of speculation. This question will have to be settled in the near future. The present figure is seventy-five dollars per ton under contract and eighty dollars for spot lots. There are a number of phases entering into the whole question. Among them are the figure for pulpwood, competition and the possibility of a decrease in the demand if quotations should ascend. It is not likely that any embargo will go into effect on the export of freehold pulpwood, at least, for many months, as it is expected that the Royal Commission, appointed to inquire into the whole question, will not bring in a report for a long period and, even then, there may be delay in action. Canadian mills have always thought it to be good policy to charge a price which will stimulate production as the mills are only profitable when a certain percentage of output is attained, but costs are rising all the time. The future has to be looked forward to in the matter of supplies and also the up-keep of limits. Forest fires have also destroyed extensive holdings, and provision must be made for this and other contingencies.

Small Cut of Pulpwood by Settlers

Owing to so much construction work going on in the railway line in northern Ontario and the activity in the mining centres there has been a shortage of labor in cutting pulpwood north of North Bay. Reports that come to hand, now that the peeling season is over, are that the quantity of wood taken out will be very much less than last year. South of North Bay there has been about the usual cut during the summer months by the farmers and settlers. There is a stronger demand for poplar. Lumber companies state they are experiencing great difficulty in getting men for the bush, and, although wages are fully ten dollars higher than a year ago, the required number of helpers is not forthcoming, but when the men return from the western harvest there may be a change for the better in the labor situation.

Spanish River Had Splendid Year

The Spanish River Pulp and Paper Mills, Limited, which have an output of 700 tons of news print daily, have concluded a very satisfactory year, according to the report which has been sent out to the shareholders. The net earnings show an increase of about $640,000, while the statement covers the twelve months ended June 30 last and is one of the most encouraging ever issued. There was an increase of over $260,000 in the amount reserved for depreciation after paying the dividends for the year on the preferred and common stock of the company, both at the rate of seven per cent. Bondholders received their proportion of these dividends under arrangements which were made in 1914, and after this there was still nearly $780,000 left to be added to surplus.

George H. Mead, of Dayton, Ohio, president of the Spanish River Pulp and Paper Mills, in a brief statement to the shareholders states: that the directors have added to the surplus account the amount of the bond sinking fund, which totaled over $1,250,000, which was no longer required, so that the surplus at the end of June, 1923, amounted to over $4,400,000. President Mead states that the profits shown in the report reflect continuous operations of the company's plants throughout the year. A number of improvements were made during the period, which, with other refinements in mill practice, will result in increasing the daily average production of news print from 650 tons to 700 tons.

Net Earnings Over $4,000,000

Net earnings for the year amounted to $4,008,155, against $3,361,537 a year ago. After allowing $736,560 for depreciation and $888,178 interest on funded debts and other loans and making an appropriation for contingencies and government taxes of $200,000 the net profits for the year amounted to $2,183,417, which compares with $1,784,917 for the previous year. Of this sum $1,405,172 was appropriated in dividends at seven per cent on both preferred and common stocks, as well as a proportion paid to bondholders. There was an addition of $1,259,863 bond sinking fund reserve, which left a surplus of $4,485,000.

The amount added to the property account during the year is nearly $282,000, as compared with close to $900,000 last year. Nevertheless, the capacity of the mills has been increased to 700 tons of news print per day. Current assets have increased to over $11,000,000, while the current liabilities stand at over $3,600,000, which shows a net working capital of over $7,500,000. During the year about $450,000 of common stock has been issued, but during the same period the bonded indebtedness has been decreased nearly $1,000,000, and now stands at slightly over $12,000,000. Loans from the bank, which now stands at $1,000,000 have been reduced $800,000.

Notes and Jottings of the Industry

William Innes, of Montreal, eastern representative of the Interlake Tissue Mills, spent a few days in Toronto last week on business.

Charles V. Syrett, manager of the Victoria Paper and Twine Company, Toronto, has returned from a visit to New York, Montreal, and other eastern cities.

The regular quarterly meeting of the directors of the Provincial Paper Mills, Limited, was held in Toronto last week when the usual dividends for the past quarter were declared. S. B. Munroe and C. A. Dewin, of Kalamazoo, Mich., were among the outside directors present.

Peter Christie, of the John Martin Paper Company, Winnipeg, who has been spending some time in Toronto, Montreal and other paper centres, has returned home.

S. F. Duncan, treasurer and general manager of the Provincial Paper Mills, Toronto, and family are enjoying a holiday up the Muskoka Lakes.

George Davidson, of Toronto, sales manager of the Howard Smith Paper Mills, has gone on a business trip to the Pacific Coast.

M. E. Crouch has been appointed manager of the Porcupine Pulp and Lumber Company, located at Hoyle, Ont. This company cuts from its own limits about ten thousand cords of spruce annually, which is shipped to the Cliff Paper Company, Niagara Falls, N. Y.

Major J. I. Hartt, of Orillia, Ont., has been appointed overseer of the Crown timber agents of Ontario by the Department of Lands and Forests. He will have supervision of all bush operations. It is hoped by the new system of supervision to avoid much

(*Continued on page* 38)

Established 1886

Appreciation

EXPERIENCE is wisdom. From experience we have learned that to give just a little more than expected will bring good dividends in the way of appreciation, friendship and more business from the same source. It is another name for service. We have the ability to perceive and the willingness to carry out just such policies, which mean so much for our customers.

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MORE ORDERS IN TORONTO

(*Continued from page 36*)

waste in the cutting of pulp wood and timber in the province. Major Hartt is an experienced lumberman.

There was a strike for a few hours at the Fort William Paper Company, Fort William, Ont., last week, when about two hundred men walked out, including the steam engineers, the boiler house crew, mechanical crew and unskilled pulp mill workers. The trouble was not over a matter of wages, but owing to the discharge of certain men. The matter was amicably settled in a short time and work was resumed.

Arthur Jewett, of the Montreal staff of the Provincial Paper Mills, and A. M. Watson, of James Ross & Co., Dundee, Scotland, was among the recent callers on the trade in Toronto.

The Howard Smith Paper Company have erected a pulpwood conveyor, with a capacity of forty thousand cords of wood, at Cornwall, Ont., and are building a new machine shop, 150 x 150 feet. Two of the paper machines are also being extended.

Uniform Methods of Cost Accounting

WASHINGTON, D. C., September 11, 1923.—A pamphlet dealing with the acceptance and installation of uniform methods of cost accounting by the members of a trade association has just been issued by the Fabricated Production Department of the Chamber of Commerce of the United States. The pamphlet is designed to "be of assistance to the officers and members of those trade associations which have undertaken to secure the numerous and important advantages of such uniform methods."

The discussion starts with the premise that the technical methods or systems have been devised, and that having gone thus far a new problem presents itself, namely, the problem of finding the most effective means of securing the installation of the uniform cost methods.

The pamphlet is divided into two distinct but co-ordinate parts, as follows:

"The Association's Problems."

"The Member's Problems."

The first part is devoted to the ways and means by which the trade association's service to its members may be made the most effective. It deals with such matters as the organization of an association cost bureau and cost councils, and provisions for keeping the members informed of developments generally.

The second part is designed to be of direct and substantial value to the president, the general manager, the auditor and other executive heads of the various member companies. It suggests some of the preliminary steps that may well be taken in order to make sure that the association's uniform cost accounting methods are put into use most effectively.

Sends Sympathy to Japan

Sympathy of the American paper industry with the Japanese paper industry was expressed in the following letter sent by Dr. Hugh P. Baker, Executive Secretary of the American Paper and Pulp Association to T. Seki, Secretary of the Association of Japanese Paper Mills in Tokio.

"The Paper Industry of the United States extends through this Association sincerest sympathy in the dreadful calamity through which your country has just passed. We are joining with the citizens of this country generally in the effort to be of some definite assistance to your suffering countrymen,

"We not only extend our heartfelt sympathy, but our good wishes for early recovery of your people from this terrible calamity, and particularly early recovery of your industries and the business of your Nation.

"While we have not had much contact in the past, nevertheless, we want you to feel that the sympathies of our people are with you."

News of the Holyoke Trade

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., Sept. 11, 1923.—The directors of the American Writing Paper Company are still working on plans for the re-financing of that concern. It is probable that a report will be available before October 1. Business continues about the same and, until the orders on hand are filled, it is not expected that there will be any great light on the prospect for fall business. The mills at present are all busy. The test will come when the stored up orders have been completed.

Officials of the firemen's union and steam engineers union have charged the past week that discrimination has been shown and have telegraphed for their international officials to come on. The paper manufacturers deny any discrimination and assert that they will keep to the strict letter of their agreement.

Fred M. Knight of the State Board of Arbitration and Conciliation is expected to give hearings this week on the matter of wages etc., which was left to him by agreement of both parties for arbitration.

News Print Stock Below Normal

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., September 12, 1923.—The stocks of news print paper were almost exhausted at the beginning of the year and, though fairly large amounts have been received, the stock is still below normal although there is no danger of an immediate shortage, according to a report received by the Bureau of Foreign and Domestic Commerce from the American Consul at Batavia. Over-issued newspaper stocks are moving slowly owing to the number of failures among the smaller Chinese merchants and to the financial situation of many of the others. This people are the principal purchasers of paper of this class and they use it as wrapping paper.

RIORDON CO. REORGANIZATION

(*Continued from page 34*)

ported to be at the annual rate of 90,000 tons. Only March 1, last, the company was working on a 65,000 tons per year basis, so that an approximate 40 per cent increase in production is shown over seven months. As additional machinery begins operations about November 1, the outlook is for still further expansion in the scale of Belgo-Canadian's output.

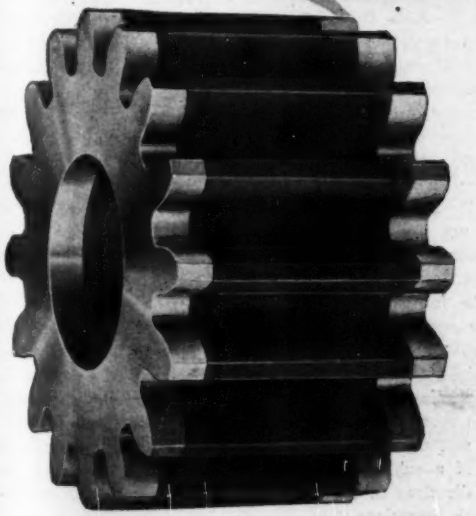
Big Timber Deal in New Brunswick

A business transaction of considerable importance has taken place in Weymouth, the large timber holdings of the Stenelin estate having passed into the hands of the New France Lumber Company, a St. John syndicate headed by H. W. Schofield as president. This valuable timber property is considered to be the largest holding of virgin timber in the Lower Provinces, and consists of upward of 10,000 acres on which it is estimated there are from 80,000,000 to 100,000,000 feet of marketable lumber. It has been practically untouched by the axe, and there have been no fires in the limits.

Workman's Compensation Rates

The New Brunswick's Lumbermen's Association is now taking steps to interview the provincial government in an effort to have the increase in rates announced by the Workman's Compensation Board of New Brunswick rescinded. The New Brunswick Workman's Compensation Board has disregarded the lumbering and pulp and paper industries in the past. From an economic standpoint the system is unsound, according to employers, and is placing capital at a decided disadvantage. The New Brunswick's Lumbermen's Association is also desirous of securing recognition of company compensation systems by the board, with reduction in rates to companies maintaining these company systems, of which there are a number in New Brunswick.

"Ah kin hardly believe mah ears"



Cotton pressed into Fabroil Gears!

In this period of inventive progress the making of Fabroil Gears by compressing cotton in great presses is not so wonderful — it is the PERFORMANCE of Fabroil Gears at which the mechanically inclined mind marvels.

To eliminate noise, absorb the shock of sudden starts and stops, and lessen vibration Fabroil Gears are installed on all types of machines. These gears stand up under hardest service and are not affected by moisture, acid fumes or quick temperature changes. Manufacturers are equipping new machines with Fabroil Gears and owners of old machines are substituting Fabroil Gears for ordinary metal gears and pinions. Blanks up to 36 inches diameter can be shipped at once.

General Electric Company

General Office Schenectady, N.Y.

Sales Offices in all large cities

40-277

New York Trade Jottings

T. J. Burke, secretary of the Salesmen's Association of the Paper Industry, is attending the convention of the association in Atlantic City this week.

* * *

Colonel Walter Scott, New York paper man, contributed a gift of land for a park to the city of Holyoke, Mass., on the occasion of its fiftieth anniversary last week.

* * *

Caroline Horowitz, of this city, claims the distinction of being the only woman rag dealer in the world. She is doing a good business, and says that last year she sold a million pounds of rags at a turnover of about $80,000.

* * *

Newman-Kohn Paper Company, Bush Terminal, Brooklyn, New York, manufacturers of paper bags, announce that on and after September 1st, 1923, the name of their kraft paper bags, both square and flat, will be "Surehold Brand."

* * *

W. B. Bullock, of the American Paper and Pulp Association, who has recently returned from a vacation in the lake region of northern Wisconsin, has been asked to plot the trails and camping spots of the district for the Northwestern Railroad.

* * *

Members of the waste paper industry will be glad to welcome Frederick Benham, a journalist of *The World*, to their craft. When he isn't writing stories for his newspaper he is making contracts for the handling of waste news print from the press rooms of the various metropolitan dailies.

* * *

An appeal has been sent out to the paper men of New York to join in the Japanese Relief. A communication from the Paper Association, 41 Park Row, asks that checks for the relief be sent to George McKinney, treasurer of the Paper Merchants' Committee, Japan Relief, 32 Beekman street. The trade is said to be responding splendidly.

* * *

A meeting of the Creditors of the Doty-Scrimgeour Company will be held at the office of Edward A. Alexander, Esq., City Investing Building, 165 Broadway, New York, on Friday, September 21, 1923, at 2:00 P. M. daylight saving time. All creditors are requested to be present, or, if unable to be present, to send a representative to the meeting.

* * *

The News Print Service Bureau has received a letter from Miss Margaret E. Reckert, an employee, who is spending her vacation in Germany. The letter, which was from Hamburg, had to be put in a large envelope to make room for the 60,000 marks postage it carried. This would have been about $15,000 before the war, but amounts to two cents now.

* * *

R. S. Kellogg, secretary of the News Print Service Bureau, returned from a visit to the Anglo-Newfoundland Development Company, bringing with him a set of remarkable photographs of their mills which he took himself. He goes to Buffalo the latter part of this week to deliver a paper before the National Association of Cost Accountants which is in convention there.

* * *

The Tokio office of Parsons & Whittemore and all its contents were destroyed in the recent earthquake. Godfrey M. James, their Japanese manager, is safe, however, with members of his family. He is a New York man and lived in Yokohama with his wife and mother, commuting between the two places. The main office in this city cabled him to go to Shanghai for a rest, after which he will return to his work in Japan.

* * *

H. B. Wadsworth, the well-known importer and exporter with offices at 51 East Forty-second street, is among the Americans in Japan at the present time who have not been heard from since the earthquake and fire. Since the heat is at its height in Japan at this time of the year it is supposed that Mr. Wadsworth was somewhere in the interior when the trouble occurred, but nothing has been heard to confirm this. He sailed from Vancouver on July 28th, and while in Japan was to make his headquarters in Tokio, although it was his intention to visit many paper mills throughout the island.

* * *

As the result of action taken by the directors of the Certain-teed Products Corporation where general offices are now at 100 East 42nd street, New York many thousand square feet of roofing materials at Manila and Shanghai have been placed at the immediate disposal of Japanese authorities for reconstruction purposes. The company's representative in Japan was instructed by cable to get into immediate touch with the authorities there and learn in what way the Certain-teed corporation, which is a large manufacturer of roofing materials, could be of greatest service to Japan.

Whalen Co. Goes into Liquidation

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Sept. 12, 1923.—The first marked effect in Canada of the Japanese disaster has been to precipitate the liquidation of the Whalen Pulp and Paper Mills, Ltd. A dispatch from Vancouver on Saturday last said:

"Chaos in the Japanese market, to which the Whalen Pulp and Paper Mills, Ltd., has been selling fully 80 per cent of its output in recent years, is ascribed as the reason for a court order appointing a receiver and manager. A financial re-organization is contemplated, it is announced, and the receiver is empowered to borrow enough money to keep the plant in operation. Wage and supply accounts at Swanson Bay and in Vancouver are in default, but the amount was not stated in court."

In an official statement issued on behalf of the Company the following explanations are given:

"The attempts to re-finance, however, have been abortive, principally because the terms of the original mortgages securing the bonds and debentures rendered it impossible to issue any new securities. During these three years no new securities have been offered or sold to the public by the company and the management has been obliged to not alone carry on its operations out of earnings, but has also been called upon to pay $500,000 on the principal of the bonds as well as heavy interest charges.

"With the full operation of three mills, it became evident that much more ready capital is required, and this cannot be obtained without re-organizing and re-financing. It was hoped that this could have been accomplished without the necessity of a receivership, but the happening of recent events, in particular the shortage of water at Swanson Bay, interfering with profitable manufactu at that plant and the catastrophe in Japan rendering uncertain the marketing of a substantial part of the company's products, have placed the directors in the position of not being able to carry on the company's operations.

"It is felt by the directors that it will not be long until the affairs of the company are readjusted on a satisfactory basis, enabling them to take advantage at their three mills of the expected heavy demand for lumber in Japan. In round figures the total liabilities of the company (including bonds, debentures, notes and trade accounts) amount to about $10,000,000 and the assets $20,000,000."

Exact Micrometer:

Accurate, correct at all points, more easily read than any other make.

Automatic Scales:

For weighing Paper, Box Board and Roofing Felt.

Electric Tester:

Uniform pressure at all times, ten times the work with one-half the effort. Can not be manipulated, does not make mistakes.

Write for Life Size Circulars

E. J. Cady & Company

549 W. Washington Blvd. CHICAGO, ILLS

INSTRUCTIVE PAPERS READ AT HOLYOKE CONFERENCE

Distributors of Products of the Crocker-McElwain Co. and the Chemical Manufacturing Co. Hold First Annual Convention When Many Timely Matters Are Discussed—C. A. Crocker Welcomes Delegates and Several Speakers Well Known to the Trade Give Opinions of Commercial Value—Session Closed Tuesday Night With an Old-Fashioned Clam Bake at Riverside Park, Springfield.

HOLYOKE, Mass., September 11, 1923.—The first Annual Conference of distributors of the products of the Crocker-McElwain Company and the Chemical Manufacturing Company closed at the Hotel Nonotuck, the evening after carrying out a program which was filled with timely discussions. It being the first meeting of all merchants selling the lines of the two companies; it was the means of attracting over one hundred of the leading paper distributors.

Crocker Welcomes Delegates

The sessions opened yesterday morning with a general conference, the address of welcome by Mr. C. A. Crocker putting all in a frame of expectancy of the interesting subjects which were to follow. Others who spoke at the general conference were vice-president S. S. Rogers, "The World Grows Smaller Every Year"; Harry Tipper of New York, "Where Will the Engineer Hit Next"; Dr. Stanley L. Krebs, "The Double Pull in Salesmanship"; Seth L. Bush, manager of research, "The Folks in the Mill"; C. H. Barr, sales promotion manager, "Associate Mills' Plan of Advertising and Distribution."

The afternoon sessions were devoted to departmental meetings which were confined solely to the Distributors of Certificate Bond. K. S. Warner, chairman of Certificate Bond Distributors, presided and the chief speakers were C. U. Townsend of the United States Envelope Company, "How Can I Sell More Tonnage?" and R. S. Bull of Brodner, Smith & Co., of Chicago, "Why We Took on the Agency for Certificate Bond." The informal dinner, given at the close of the busy day was addressed by Rev. Joseph G. Gilkey of Springfield.

Spencer Lathrop Among Speakers

Today's sessions occupied the morning and afternoon, and were addressed by Mr. Spencer Lathrop, president of Lasher & Lathrop, Inc., New York, "What Can the Mill Reasonably Expect in the Way of Co-operative Selling Punch?" Frank A. Juckett, president of Old Colony Envelope Company, "Converted Items"; L. A. Albger of Whitehead & Albger of New York, "Where Does the Distributor's Obligation Begin?" Mr. C. A. Alpers of Cleveland Paper Manufacturing Company, "Why I Think the Distributor Falls Down so Frequently on Ledger Paper"; A. E. Stevens of Chope-Stevens of Detroit, "How We Compete With Mills That Sell Ledger Paper Direct to Our Printers"; S. G. Garver of J. E. Linde Paper Company, "Can the Distributor Depend on His Regular Salesmen to Sell Ledger Paper?" A surprise was sprung on those attending the conference, when at the close of the sessions today all were invited to participate in a "special" dinner which proved to be an old-fashioned clam bake given at the Riverside Park, Springfield, Mass.

Those Who Attended

Among those who were present were the following:

Bertram E. Linde and Joseph W. Lux of J. E. Linde Paper Company, New York.

Samuel G. Garner, Manager, J. E. Linde Paper Company, Newark, N. J.

William Steadman, Manager, J. E. Linde Paper Company, Harlem, N. Y.

C. E. Waite and A. C. Hall of John Carter & Company, Boston, Mass.

Henry W. Pfalzgraf of Vernon Brothers & Company, New York.

L. R. Johnston of Johnston-Albershart Company, Cincinnati, Ohio.

G. G. Custer of W. F. Nackie Paper Company, Milwaukee, Wis.

Lionel A. Walden of Walden Sons & Mott, New York.

H. B. Thurston and C. H. Leissler of Conrow Brothers, New York.

C. Raymond Smith of Van Reed Paper Company, Reading, Pa.

Lyman D. Post and Joseph Hodgins, New York.

A. A. Tanyane, Advertising Manager PAPER TRADE JOURNAL, New York.

William H. Rourke of Rourke-Eno Paper Company, Hartford, Conn.

K. S. Warner of John F. Sarle Company, New York.

Mr. Taylor of Beekman Paper and Card Company, New York City.

C. K. Urquhart of Urquhart Paper Company, New York.

Clare Irwin of Irwin Paper Company, Quincy, Ill.

Charles W. Townsend of Logan, Swift & Brigham Company, Worcester, Mass.

W. F. Mcquillen and W. B. Stevenson of A. Storrs & Bement Company, Boston, Mass.

Michael Pomerance of Forest Paper Company, New York.

H. A. Washburn of Messinger Paper Company, Chicago.

Richard B. Wigton, Howard F. Anderson and Charles C. Hoffman of Donaldson Paper Company, Harrisburg, Pa.

J. B. Birkner, E. J. Birkner and Gardner Wright of Acme Paper Company, St. Louis, Mo.

Carleton Knight of Knight, Allen & Clark, Boston, Mass.

F. W. Wilson of Blake, Moffitt & Towne, New York.

Charles Koch of Barton, Duer & Koch Paper Company, Washington, D. C.

Charles A. Esty of Chas. A. Esty Paper Company, Worcester, Mass.

Leonidas Beck of Chas. Beck Company, Philadelphia, Penna.

George R. Tolen of Midland Paper Company, Chicago.

E. A. Petrequin of Petrequin Paper Company, Cleveland, Ohio.

Spencer Lathrop of Lasher & Lathrop, Inc., New York.

R. E. Parker of Parker, Thomas & Tucker Paper Company, Chicago.

LeRoy Gardner, Thomas Gregory and George Gordon of R. L. Greene Paper Company, Providence, R. I.

Howard W. Rowe of Dobler & Mudge, Baltimore, Md.

F. E. Miller of Central Ohio Paper Company, Columbus, Ohio.

H. F. Donohue of Molten Paper Company, Philadelphia, Penna.

Frank Somma and W. H. Smith of W. H. Smith Paper Corporation, Albany, N. Y.

Benj. LaBree of American Paper Exports, Inc., New York.

B. E. Reeves, Buffalo and A. H. Seyler, Rochester, of Alling & Cory Company.

Brad Stephens, Boston, Mass.

I. F. Miller of Chope-Stevens Paper Company, Detroit, Mich.

L. A. Alliger of Whitehead & Alliger Company, New York.

John Howe and F. W. Anderson of F. W. Anderson & Company, New York.

George Matthews of New Haven Paper Company, New Haven, Conn.

C. R. Alpers of Cleveland Paper Manufacturing Company, Cleveland, Ohio.

A. H. Phillips of Troy Paper Company, Troy, N. Y.

R. S. Bull of Bradner Smith & Company, Chicago.

F. L. Wood, R. L. Allison, E. P. Winter and Henry Emery of U. S. Envelope Company, Springfield, Mass.

George Ward of D. L. Ward Company, Philadelphia.

PAPER MILL ADVERTISEMENT No. 11

In the Paper Industry

Farrel Calenders
Farrel Rolls
and
Farrel Roll Grinders

receive preference wherever the reputation of a Paper Mill depends upon high quality of product.

NO plant is independent which cannot keep its own machine tools in condition.

The machinery required to keep a tool in condition is as important as the tool itself.

The self-reliant paper mill, therefore, maintains a Farrel Roll Grinding Machine.

Such an installation makes the plant independent of outside grinding sources and assures them of the most accurate re-grinding at one and the same time.

While not actually engaged in the production of paper, the Farrel Roll Grinder is actually a production unit. It keeps your productive roll machinery working in the prime of condition and eliminates the ordinary long delays or shut-downs when the rolls require re-grinding.

We will be glad to forward you full particulars if you will send us the dimensions of your largest roll so that we may know the size of the grinding machine you would require.

FARREL

Established 1848

FOUNDRY & MACHINE COMPANY

ANSONIA, CONN.

Branch Office

802 Swetland Bldg., Cleveland, Ohio

Branch Plant

Buffalo, N.Y.

Editorial

Vol. LXXVII New York, September 13, 1923 No. 11
HENRY J. BERGER, Editor

NEARLY AS DANGEROUS AS FIRE

That insects present nearly as great danger to our forests as does fire is impressively set forth in a recent report of the Forest Service published by the United States Department of Agriculture. In this connection the report says:

"The protection of forest and forest products from insects is of scarcely less importance than their protection from fire. Losses due to insect attacks upon living trees and crude, finished and utilized forest products are estimated by the Bureau of Entomology at $130,000,000 annually. The Bureau of Entomology has made notable progress during the past twenty years in determining the life history of forest insects, in devising methods of checking them, and in meeting emergencies by educational work and systematic control measures."

Cooperative insect control on a large scale is at present being undertaken on Federal, State and private lands on the Pacific Coast and Rocky Mountain forests. Over one million acres of land and over eleven billion board feet of yellow-pine timber, with a stumpage value of over $25,000,000, are involved in a single contract project. During the past ten years the western pine beetle has killed on this area over one and one-half billion board feet of the best trees, with a stumpage value of more than $3,000,000. The Bureau of Entomology estimates that the cost of bringing this insect under control will be less than $150,000.

It is also estimated that, in addition to the appropriation for research and for fighting the gipsy moth in New England, expenditures for fighting tree-killing insects in the whole country do not exceed $75,000 annually.

The most serious menace of disease to forest crops at the present time lies in the imported epidemic. The chestnut blight, imported from eastern Asia on nursery stock in the early nineties, has all but exterminated this useful tree throughout its northern range. At this time the white-pine blister-rust is widespread through the northern range of the eastern white pine.

A study of these facts brings realization that fire is not the only danger from which our forests need protection.

IS A NEW BUSINESS CODE NEEDED?

Every once in awhile someone starts some sort of an agitation for a new moral code or a new set of rules which will successfully whip into line the human conscience where the Ten Commandments have failed. So often do we hear the need of such rules and such codes exploited that we have come to wonder if the Ten Commandments have really been worn out and if we need to have them brought up-to-date or made stronger to meet modern times.

We are told that, while the world has not altogether neglected sin as it has been progressing in its development of industry, education, etc., we have really failed to manufacture any new vices that were not known to the world centuries ago. If that is so we are left to wonder why, if the Ten Commandments were sufficient ages ago, we should be obliged to revamp them now, add to them or devise an entirely new set of rules to regulate our morals.

Guy Gundaker, president of the International Rotary Club, last week advocated a new moral code for business men, intimating that the business conscience has become dulled.

Business is by no means lily white or virgin pure. There are many business men who are absolutely unscrupulous and who, instead of having consciences which have become dulled, have none at all. They are not all like that, however, and if the Ten Commandments can not hold the unscrupulous business man to decent business practices, we doubt if any special code which can be written at this late date will reform him.

We maintain that the Ten Commandments are all anyone needs in business or anywhere else. The trouble is not with them but with the human heart. If business men kept their eyes on these age-old commands and forgot their excessive worship of the Golden Calf, a new moral code would not find any work to do.

MORAL HAZARD IN INSURANCE

It is announced that several large insurance companies are working with the Retail Merchants' Bureau of the Philadelphia Chamber of Commerce in developing the Co-operative Insurance Bureau, the purpose of which is to help eliminate the moral hazard of risks.

There are large possibilities in this undertaking for the moral hazard in insurance, while it has been more or less a vague quantity in the past, has a subtle influence over fire losses. Fire insurance companies have, in the past, confined themselves largely to a study of means for eliminating fires caused by carelessness. Some good work has been done along that line. Fire prevention propaganda has done much to bring home to the people the fact that a little spark may kindle a great conflagration. The Educational work done in this direction has borne real results, and greater results will be attained until fires due to gross carelessness become fewer and fewer.

The unavoidable fire and the fire due to carelessness, however, are not the only factors to be reckoned with. The moral hazard looms big, and here again there is an opportunity to do as efficient work as has been done in fire prevention work.

It is the plan of the new undertaking to collect and tabulate credit, police and other records of individuals and make them available for the use of underwriters in passing upon the moral hazard of risks submitted for insurance. It is believed that in this way moral hazard losses which fall upon the honest merchant may be eliminated to a large extent.

As in financial credit a man's natural honesty and disposition to meet his obligations figures quite as much as does the amount of money or property he is worth, so does the moral worth of a man who seeks fire insurance figure in the risk quite as much as does the peculiarities of location or structure of the building on which he seeks insurance. The fire insurance men therefore will do well to link up moral responsibility with their study of risks, making it difficult or prohibitive for the man with an undesirable character to procure fire insurance no matter how attractive a risk his property may be when considered solely on a property basis.

SERVICE AND SELLING

By T. J. Burke, Secretary-Treasurer, Salesmen's Association of the Paper Industry

That any industry which considers the adoption of a method of selling its products through an "Open Exchange," thereby issues a distinct challenge to the salesmen in that industry, cannot be disputed.

During the past decade rapid strides have been made in the art of salesmanship, and although there are some who think that the pulp and paper industry has lagged behind in its sales methods, yet I believe we are all willing to admit that some progress has been made in the right direction. There have been notable instances of mills which have specialized in certain products, and by means of national advertising and modern sales methods, have succeeded in making their product known from Maine to California. They are, however, few and far between. When one thinks about this, one is naturally somewhat surprised considering that the product which this industry sells, is the one so much affected by the amount of advertising placed by industry at large. Manufacturers of certain grades of paper, cannot help but be informed of the amount of advertising being done throughout the country, since this must have considerable effect upon their sales. Inasmuch as this is a fact, is it not strange that more of them do not come to an appreciation of the benefits to be derived from a constant and consistent advertising policy? Doubtless there are good reasons why more national advertising is not done by pulp and paper manufacturers, of which I am not aware. However, as the new secretary-treasurer of the Salesmen's Association, I must take an increasing interest in selling and distribution methods in the industry.

Criticism of Distribution Methods

It has been said on numerous occasions, that the distribution methods in use generally in the industry, cost more than they ought. The reasons for this are not far to seek, but the means for changing these methods are difficult to suggest. That is a matter however, which I would like to see taken up seriously by the different groups within the industry.

To return to the "Exchange Method" of selling; while this method has been in use for some years, in the selling of stocks and bonds and certain raw materials, it has not as far as I am aware, ever been successfully used in the case of any fabricated products. It is said this method of selling makes a great appeal to the average man. Why? Because it is quick and easy, and apparently inexpensive, since as one or two Brokers might according to the claims made, be able to sell as much paper or paper products as a fair number of salesmen. As statetd above, since most of us admit that the selling and distributing methods in use might be improved, it can be very easily understood therefore, why at first sight this system of selling appeals to the average man.

It should be remembered, however, that those "Exchanges" which have been carrying on successfully for years, are dealing in raw or basic materials, the quality of which can easily be ascertained. Take the Stock Exchanges; no stocks and bonds can be listed on these "Exchanges" until statements have been submitted and verified regarding the affairs of the corporations issuing them, so information regarding their intrinsic value is easily ascertainable. In other words, they are graded by experts. Again, in the case of the grain and cotton Exchanges, experts are employed to grade all materials offered for sale on these Exchanges. Of course, disputes occur between these experts and sellers, but the decision of the former is final, and must be accepted. This expert work can only be done by those who have had a great deal of experience, and requires constant care to avoid mistakes. Now, in the latter case these experts are dealing with raw products, which only vary because of natural conditions.

Now let us consider the case of an "Exchange" dealing with a "fabricated product," that is to say, with something made from various raw materials, by the use of various machines under varying conditions. How is it possible for anybody no matter how expert, to certify to the fact that a certain fabricated product is of the grade represented by the seller? No doubt a great deal could be done to make it possible for experts to thus certify by standardization in the different groups in the industry, but it seems to me, at any rate, that such standardization must take place before it will ever be possible for any large amount of selling to be carried on by means of an "Open Exchange."

It has been suggested by one group in the industry, that one of their products should be taken as the base, and that the other products should be valued by means of a "fixed differential" from the value put on the basic product. Is this legal? We are told that it is, but according to information which has come to hand, it would appear, that at least there is reasonable doubt on this point. Even if this is granted, however, there still remain important problems to be solved in the working out of this "Open Exchange" method to selling. For instance in all probability, judging from the difficulty experienced in classing certain kinds of imports, there will be disputes regarding the grade in which certain paper products are to be included. But there is another and far more important problem which we might consider in this connection. An "Exchange" necessarily must settle its own disputes, otherwise confusion would reign supreme. It therefore is necessary to arrange for arbitration of such disputes, and that the Exchange members should agree to accept the decisions of the arbitrators appointed as final.

When dealing with "fabricated products," it is obvious that the duties of such arbitrators may involve considerable work, and necessitate investigations which would prove very irksome to manufacturers.

Among the articles of an "Exchange" which has recently been opened in Chicago, I am told the following Sections appear:

Accusations by Members

One or more members may file with the Board at any time, a written accusation charging a member with one or more offenses against the Exchange. The accusation shall state in detail, the acts or omissions complained of and shall be signed by the member or members making the accusation.

Investigating Committee

If at any time the Board shall have reason to suspect that any member has been guilty of an offense against the Exchange, and so accusation charging such an offense has been filed, the Board may appoint a Committee to investigate whether there is just ground for such assumption. If the Committee decides that there is, it shall file with the Board a written accusation against the suspected member, charging him with a specific offense and stating in detail the acts or omissions complained of.

Committee May Compel Appearance, etc.

The Investigating Committee may require this member under investigation to appear before the Committee, and testify concerning the subject matter of the investigation. The Committee may also require such a member to produce such of his books and papers, as the Committee may deem relevant to the investigation. Such member shall be under obligation to appear and testify or produce his books and papers, upon written notice served not less than ten days before the hearing before such Committee. Notice signed by the Chairman of the Committee requesting the member under investigation to appear and testify, or to produce books and papers served personally upon such member, or sent by registered mail to his place of business, shall be sufficient notice under this section.

(*Continued on page 60*)

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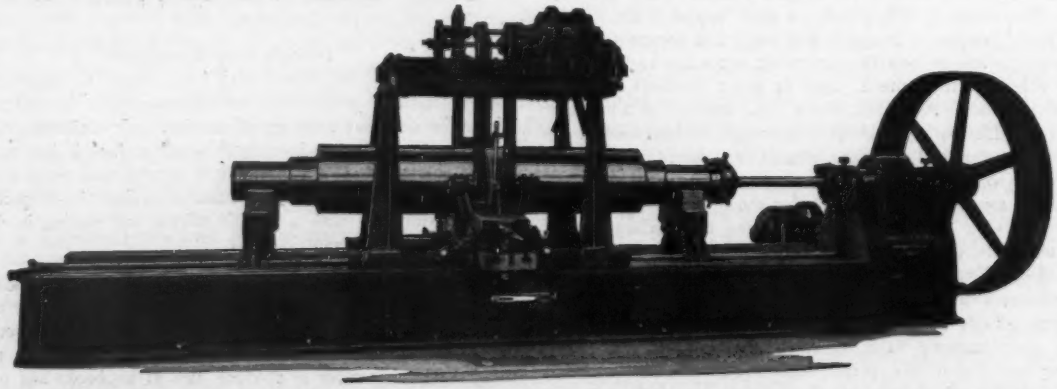

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

THE PAPER INDUSTRY: PROBLEMS AND RECENT DEVELOPMENTS*

By Bjarne Johnsen, of the Hammermill Paper Co., Erie, Pa.

When wood was introduced as a paper-making material, about the middle of the 19th century, it was believed that an inexhaustible supply of raw material had been found. It is true that there are sufficient areas available to produce all wood necessary, but experience has shown that only a very few countries have realized the importance of assisting nature in maintaining the forests. These countries have conserved their supplies by forest management, other countries have kept their supplies by importing wood, and still others have depleted their supplies and are now anxiously looking for new sources either of wood or other materials. Hand in hand with the depletion of the forests of the world a very rapid increase in consumption of paper has taken place, and the most important problem for all paper-producing countries is now conservation of existing forests and development of new forests by reforestation. While the paper industry uses only a small percentage of the total wood consumed, the paper manufacturers, either directly or through various associations, are doing more toward conserving and improving forests than any other wood-using industry.

With the tremendous increase in the manufacture and consumption of paper, wood supplies have to be secured from greater and greater distances from established mills, which results in increases in costs due to freight charges. As a result of the increased costs of raw materials the mills are directing their attention more and more to improvements in processes leading to greater efficiency and economy.

The yield of mechanical and chemical pulps has been materially increased by the introduction of barking equipment, which permits the removal of bark without at the same time removing part of the wood, as was the case with the knife barkers which previously had been universally used.

In the chemical cooking processes efforts are now being made to increase yields by improvements in existing methods and by development of new methods. In the manufacture of soda and sulphate pulps it has been found that impregnating wood chips with cooking liquor at a low temperature and then drawing off the liquor and steaming results in a considerable increase in the yield of pulp. This idea originated several years ago with the sulphite process in which, however, it has not so far been a commercial success, owing to the fact that complete impregnation of chips with the bisulphite solution is very difficult to accomplish. However, it is claimed that the yield in the sulphite process can be appreciably increased by heating the chips with water or waste liquor from previous cooks before actual cooking is started. By the addition of sulphur to the alkaline cooking liquors it is claimed that higher yields and better quality of fiber can be obtained in a shorter cooking time.

Improvements in Sulphite Process

Experiments with the use of sodium sulphite in place of calcium bisulphite have recently been continued, with very promising results as far as yield and bleaching quality of the product are concerned. The main problem connected with this process (Bradley and McKeefe) when operated on a commercial scale is the recovery of the sodium salt which is necessary to make the method economical. It is anticipated that the application of sodium sulphite will make possible the utilization of certain woods which cannot be successfully cooked with calcium bisulphite.

A higher yield and better quality of fiber, as well as a saving in fuel and chemicals, are claimed by the use of a patented modification of the sulphite method (Decker), in which the relief gases and liquor are transferred from one digester to another during the cooking operation. It is reported that this method has been successfully operated in a Canadian mill for some time.

Resinous woods, such as the southern pines of the United States, have not been utilized in the sulphite process without previous extraction to remove the pitch. Recent reports from Europe discourage the use of organic solvents for this purpose but encourage treatment with weak solutions of alkali previous to sulphite cooking. In some newsprint mills jack pine has been handled without previous extraction by the sulphite process with fairly good results, and investigations are under way to find out if high grade sulphite pulp can be produced from this raw material, which is quite plentiful in Canada.

The greatest progress in the improvement of existing methods, particularly in the sulphite process, has been accomplished as the result of increased knowledge of the chemistry of wood and the chemistry of the reactions which take place during cooking. Investigations along these lines which are being conducted by scientific institutions as well as by various mills will undoubtedly result in further improvements in the near future.

A great problem in the refinement of the pulping methods is the

*Industrial and Engineering Chemistry.

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recovery of by-products. In spite of the numerous methods which have been proposed for the utilization of the organic matters contained in sulphite waste liquor, the problem cannot be considered as solved. A large number of the plants which have been recently erected, particularly in Europe, for the production of ethyl alcohol, some of which were in operation during the war period, have now discontinued operation. This has been due partly to adverse legislation and partly to competition with other materials because of the higher cost of production of ethyl alcohol from this waste. Other products have been produced commercially in some countries for use as substitutes during the period of abnormal market conditions. With the improvement in the design of evaporators it has been found profitable in some cases to use the concentrated liquor as a fuel, but this should be considered rather as a destructive disposal of the liquor in locations where its elimination has been found to be necessary. The real problem will not be solved until it is possible to separate the various constituents of the liquor and refine them into high-grade products.

In the alkaline processes it is customary to evaporate the waste liquors in order to recover the alkali, in which case the organic matter furnishes the fuel necessary for incineration. A recently developed process (Rinman) which has already been commercially used with success, includes the recovery, from the organic matters, of methanol, acetone, and various oils by means of distillation, and in this case the fuel gases developed in the process are used for heating the retort.

Along the line of conservation of wood are the attempts to develop better ways of storing pulpwood so as to reduce losses due to decay. Investigations have been made to throw more light on the actual losses and the effect on the quality of fiber as a result of decay. Valuable work is also being done to determine the most profitable ways of utilizing wood which has decayed in the standing forest or during the storage period.

Wood Substitutes

While wood is the ideal raw material for the ever increasing production of paper, a certain amount of the fiber required is being secured from other sources, such as various straws and grasses. Esparto and straw are extensively used in Europe for the production of high-grade papers, and investigations are constantly being made to determine the value of other plants, such as bamboo, reeds, various grasses, and the like. The use of these raw materials has not been considered very attractive in countries where wood could be easily obtained, because of the difficulties in harvesting, transporting, and storing of materials of such a bulky nature, and also on account of lack of uniformity in the materials which makes the application of existing processes difficult. Nevertheless, it is reported that a mill is in operation in Florida for the purpose of utilizing saw-grass for the manufacture of high-grade pulp. In spite of the difficulties in harvesting and the low yield, this mill is planned for an ultimate production of 100 tons a day.

Investigations so far seem to point to the desirability of handling these plant materials by a combination of cooking processes with utilization of by-products, which results in greater economy, a better product, and higher yields. Such results are claimed for chlorination processes (DeVains, Peterson, Cataldi, etc.) recently developed in Europe, which include treatment with weak alkali followed by a chlorination either with the chlorine gas or in aqueous solution. After the chlorinated substances have been removed by means of weak alkali, a yellow product is obtained which can be refined to a white pulp by means of the ordinary bleaching process. It is pointed out that such a process is particularly attractive in localities where power is cheap, because sodium chloride and lime are the only chemicals required.

Improvements in Bleaching

In the bleaching process improvements in equipment make it possible to bleach at a high density and a low temperature, which results in a saving of bleach and an increase in yield. Such equipment has been developed more on the basis of experience than as the result of scientific research. It is only very recently that Schwalbe published results of extensive investigations on the bleaching of pulp, which not only explain many of the practical experiences, but also give additional information regarding the chemistry of the process. This information will undoubtedly influence future development of bleaching equipment. A very interesting result of his experiments is the establishment of the fact that during bleaching carbon dioxide is developed which is absorbed by the fiber and retards the bleaching. This shows the necessity of removing the carbon dioxide by mechanical means, such as agitation, or by increasing the temperature.

Another important result is the difference in the action of chlorine and hypochlorous acid because of their effect on yield and on the final purity of the fiber, the hypochlorous acid reacting with the coloring matters while the chlorine attacks residual lignin compounds. Similar conclusions were reached by Heuser and explain results obtained by investigators who have studied the comparative merits of acid and of alkaline bleaching and the effect of a combination of both.

Sizing

Probably the most important chemical operation in the paper mill is sizing. There has been much discussion concerning this process and much difference of opinion concerning the chemistry of the operation. During the past year independent investigations by Heuser, Lorenz, and Sieber have reached practically the same conclusions—i. e., that the sizing is the result of several distinct reactions, the most important of which are adsorption between the two colloids, free rosin and aluminium hydrate, and a further adsorption of the compound thus formed by the colloidal cellulose fiber, the reactions being based on the electric charges of the respective substances. In these reactions the importance of the application of colloid chemistry is, perhaps, more clearly demonstrated than in any other paper-making process. Further steps in the investigation of sizing must include consideration of the colloidal nature of the cellulose fiber to a greater extent than has been the case heretofore. There must also be included a more thorough study of the colloidal changes of the cellulose fiber as affected by the beating process. The economy of the beating process, so far as beater construction is concerned, can be successfully studied on the basis of the excellent contributions on this subject recently made by Sigurd Smith.

Importance of Scientific Control

Many of the developments which have been mentioned are the results of investigations carried out in scientific institutions. In order to apply such results to the best advantage, the services of technically trained men are necessary and the tremendous improvements which have already been made in the efficiency and economy of the processes, as well as in the quality of the final products, are due to a large extent to the wider employment of technically trained men. While technical control is by no means universal, there has been a decided improvement in this respect during the past few years, and there is an increasing tendency on the part of even the smaller mills to follow the example of the larger companies which have successfully applied strict scientific control to all their operations and products. As one example of the result of control it may be pointed out that only a very few years ago it was considered impossible to increase the speed of newsprint machines to 1,000 feet per minute. Today there are machines running at even greater rate and other machines are under construction which are expected to operate at much higher speeds. This development is, of course, due to a large extent to the mechanical improvements in paper-machine construction, but no less due to the uniformity of the ground wood pulp, which is a direct result of scientific control of the grinding process. This illustration of the

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results of scientific control in the comparatively simple newsprint process indicates what is being done and what can be accomplished in the more complicated operations involved in the manufacture of finer papers.

The economic utilization of fibrous raw materials also includes prevention of losses. In the course of the manufacture of paper there are a number of washing and concentrating processes in which the waste waters may carry away large amounts of fibers. The reduction or elimination of these losses, which in some mills are very large, is one of the problems of a special committee of the Technical Association of the American Pulp and Paper Industry. So far the work of this committee has consisted in finding out the nature and amount of these wastes and in informing mills which have neglected this subject how such losses can be determined, and also in investigating the most efficient equipment for recovery of this material. Most complete recovery has always been obtained by means of settling tanks or basins of various constructions, provided these are of ample capacity, and recently various coagulants have been suggested as a means of accelerating such settling. Another phase of the work of the committee is the utilization of wood room refuse, such as bark and sawdust. These materials are commonly disposed of as power plant fuel, but since their fuel value is very low because of the large amount of moisture they contain, the efficient removal of the greatest possible part of the moisture by means of presses is being studied.

In the discussion of sizing and beating reference was made to the importance of a more exact knowledge of the part which the cellulose fiber, as a colloid, plays in the reactions. In the other processes, such as cooking, bleaching, dyeing, and the like, the value of a thorough understanding of the nature of cellulose is no less apparent. The establishment of cellulose research institutions in Europe and the United States and, more recently, the formation of a cellulose division of the American Chemical Society, is therefore keenly appreciated by the paper industry. More fundamental data concerning the material of prime importance, cellulose, which will be the result of further research must necessarily contribute more than anything else toward the development of the paper industry on a sound scientific basis.

PAPERS TO BE PRESENTED BEFORE CELLULOSE DIV.

The following papers are to be presented before the Cellulose Division at the Sixty-sixth general meeting of the American Chemical Society in Milwaukee, Wis., September 10 to 14, 1923:

Ritter and Fleck.—*The Chemistry of Wood—VII.* Analyses of 10 or more American species according to the methods used in former work are reported. Both heartwood and sapwood were analyzed separately in all cases. The results obtained confirm the previous analyses and no new generalization can be made.

Ritter and Fleck.—*A Study of the Chlorination Method for Determining Cellulose in Woods.* It has been found that short chlorination periods of about 5 minutes each are as efficient as the usual longer periods of from 10 to 25 minutes. These results will not only make it possible to shorten the time required for the cellulose determination but also suggest that chlorination treatments for the commercial removal of ligneous materials could be carried out more economically in shorter periods.

Bray and Andrews.—*Chemical Changes Caused by Decay in Groundwood.* Weighed amounts of groundwood pulp were subjected to various periods of decay and the weight and chemical composition of the partly decayed samples were determined. As in previously reported cases, the decay consists largely in the removal of cellulose, the lignin remaining practically unchanged. Even after a 2-year period, however, there was some cellulose left in the decayed pulp.

Sherrard and Blanco.—*Improved Method for the Determination of the Copper Number of Cellulose.* This is a description of the modified method for determination of the copper number which is short and reliable and which has been found valuable in investigation of the residues left after each progressive hydrolysis of wood with hydrochloric acid.

Sherrard and Blanco.—*Preliminary Work on the Partial Hydrolysis of Wood Cellulose.* In hydrolyzing the cellulose obtained from wood by the Cross and Bevan method by boiling with water for several hours a very readily soluble material is obtained which is apparently a polysaccharid. This is the first report of a product of this kind being obtained from wood cellulose and further study of the product may give new information on the composition of wood.

R. W. G. Wyckoff.—*The Usefulness of X-Ray Diffraction Methods in the Study of Cellulose and Related Compounds.* This paper will not report any new work on the application of X-Ray methods to cellulose, but it is intended to give cellulose chemists some idea of what use can be made of this physical method in solving their problems on the constitution of cellulose.

J. O. Small.—*The Viscosity of Cotton Cellulose.* The use of cotton cellulose as a raw material for many industries has become widely extended and from a practical point of view, viscosity is its most important physical property. A brief outline is given here of factors which are believed to influence viscosity from the growth of the cotton plant until the purification treatment has been completed. A method is described which has been used for determining the viscosity of cotton cellulose in cuprammonium solution.

Ralph H. McKee and Donald E. Cable.—*A Liquid Sulphur Dioxide Process for Sulphite Pulp.* There are several species of coniferous woods which are only unsuited for manufacture into sulphite pulp, because of their high content of resinous matter. The process proposed here consists in chipping such wood, dissolving out the turpentine and rosin from these chips by use of liquid sulphur dioxide as a solvent, and then cooking the chips with the ordinary "sulphite acid." The pulp obtained is a good quality sulphite pulp. Furthermore, this process gives promise of yielding commercial quantities of turpentine and rosin as by-products at less expense than encountered in any of the recent methods of isolation. Certain variables in the above extraction as studied experimentally are discussed. A few mechanical difficulties have been discovered, but have been satisfactorily solved.

Ralph H. McKee.—*Proper Use of Sulphite Waste Liquor.* To properly utilize sulphite waste liquor requires that it all be utilized and that no objectionable residue be emptied into the streams. The author shows that this can be accomplished, and with large financial profit, by fermenting by a new process, but one which has been tried in commercial size units, and after distilling off the commercial grade alcohol, evaporating the residual material and using it as fuel. The fuel obtained from an average pulp mill is adequate to give a thousand horse power day and night, and in addition more than sufficient steam to do all the evaporation required.

S. A. Mahood and J. L. Ebaugh, Jr.—*The Effect of Temperature in the Determination of Cellulose in Woods.* Data from preliminary experiments, presented by one of us at the Birmingham meeting showed that the effect of temperature in the determination of cellulose in woods is negligible. This conclusion has now been confirmed by a further study of this phase of the determination for temperature ranging from O° to 30°. The results are in accord with those of Sieber and Walter but contrary to those of Cross and Bevan and to the view of Renker.

Rarely has a meeting of the Chemical Society presented a program abounding in such rare interest as on this occasion.

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CYLINDER PAPERMAKING MACHINE

In a patent recently issued to George L. Bidwell, Superintendent of Warren Manufacturing Company, Riegelsville, Pa., is described important improvements in a cylinder machine designed by Mr. Bidwell. Warren Manufacturing Company has had two machines of this design in operation for some time and will start another in a short time. The transcript of the patent is appended.

My invention relates to improvements in paper making machines of the cylinder type, and consists of a construction wherein there is means to produce a forced feed from the head or flow box to each cylinder vat, means of control for such feed, means to provide a gravity discharge of suction or "white" water from the inside of each cylinder mold to said flow box, which latter is located below the level of discharge from said mold, means located between said discharge and said flow box for regulating and controlling said discharge, and means to provide an overflow between said discharge from said mold and said flow box, together with such other elements and parts and members as may be necessary or desirable in order to render the machine complete and serviceable in every particular, all as hereinafter set forth.

One object of my invention is to produce a cylinder paper making machine wherein there are improved means for feeding the cylinder vats with the solution of water and fiber, for removing the water from the inside of the cylinder molds, and for controlling the suction, whereby is produced a more nearly uniform, stronger, and better closed sheet of paper, which is free from lumps, and the paper is made at a greater speed, whereby the output of the machine is materially increased.

Another object is to provide a machine of this character with a simplified and therefore less expensive piping system, the advantages of which will be clearly apparent.

It is highly important, in a machine of this character, thoroughly to mix the water with the fiber so that the sheet forms on the mold uniformly, well closed, and free from lumps, and a further object of my invention is to provide the machine with means and mechanism wherewith the aforesaid thorough mixing together of the water and fiber is obtained.

Still another object is to afford simple yet highly efficient means of control for the solution and suction water, to the end that the same may be regulated to meet any and all conditions.

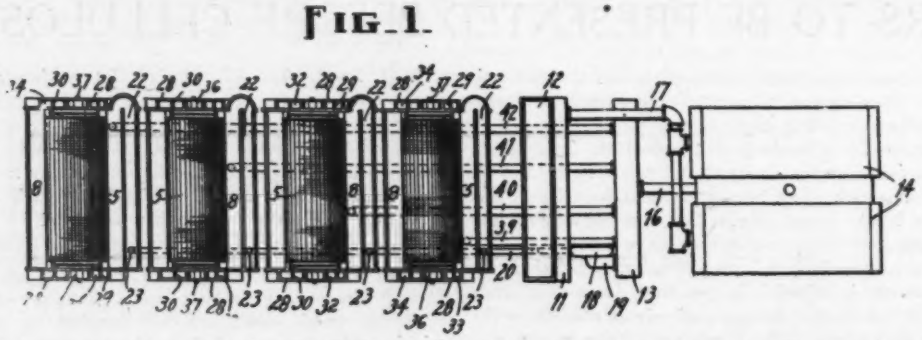
Other objects and advantages will appear in the course of the following description.

A preferred embodiment of my invention, whereby I attain the object and secure the advantages of the same, is illustrated in the accompanying drawings, and I will proceed to describe the invention with reference to said drawings, although it is to be understood that the form, construction, arrangement, etc. of the parts in various aspects are not material and may be modified without departure from the spirit of the invention.

In the drawings, in which similar characters of reference designate similar parts throughout the several views, Figure 1 is a top plan of a cylinder paper making machine which embodies a practical form of my invention as aforesaid, the couch rolls and endless felt being omitted; Fig. 2, a side elevation of said machine; Fig. 3, an enlarged, top plan of one of what may be termed the cylinder units of the machine, without the associated couch roll and felt; Fig. 4, an end elevation of said unit; Fig. 5, a left-hand side elevation of said unit as the same is disposed in the preceding view and in Figs. 1 and 2; Fig. 6, a transverse, vertical section through said unit, taken on lines 6—6, looking in the direction of the associated arrow, in Fig. 3, some of the connections being omitted; Fig. 7 a transverse, vertical section through said unit on lines 7—7, looking in the direction of the associated arrow, Fig. 3, the associated couch roll and felt being omitted from this and the two preceding views, and, Fig. 8, a central, vertical section through an end portion of said unit, taken longitudinally.

I will briefly describe some of the old elements of the machine illustrated in the drawings, and refer to the manner in which paper is made on a cylinder machine, before taking up the new features of the machine. It may be noted at this point that the machine here comprises a battery of four cylinder units, but that such number may be increased or decreased.

FIG. 1.



At 1 in Fig. 2 is represented a pit beneath the cylinder units, such as is commonly to be found in connection with machines of this character.

In Figs. 2 and 4 a couch roll for each cylinder unit is represented at 2, and an endless, woolen felt at 3, supporting rolls for which felt are represented at 4 in Fig. 2. The couch rolls 2 are above and operate in conjunction with four cylinder molds 5 of unusual construction. The felt 3 is driven and in times drives or causes to rotate the couch rolls 2 and the cylinder molds 5 by the customary means and in the customary manner. The covering of each mold 5 consists of a fine wire-mesh made up of from fifty to one hundred wires to the inch, according to the refinement of the fiber.

Each cylinder mold 5 is located and revolves in a cylinder vat 8, which latter in practice contains a solution of water and fiber in the proportion of approximately 99½ per cent water and ½ per cent fiber. A tight joint is formed between each end of the mold 5 and the adjacent side of the vat 8, as by means of a felt collar 9 and a metal collar 10. The only way, therefore, for water to enter the interior of the mold 5 from the vat 8 is through the wire-mesh of said mold. In flowing freely from the inside of the mold 5 the water creates what is technically known as "suction." The degree of suction is measured by the difference in the level of the solution in the vat 8 and the level inside of the mold 5. This suction causes the fibers to be deposited on the mold, and, as said mold rotates and carries the upper portion of its periphery above the level of the solution in the vat, the wet sheet of paper is "felted" or "couched," by means of the endless felt 3 which rides on top of the mold and

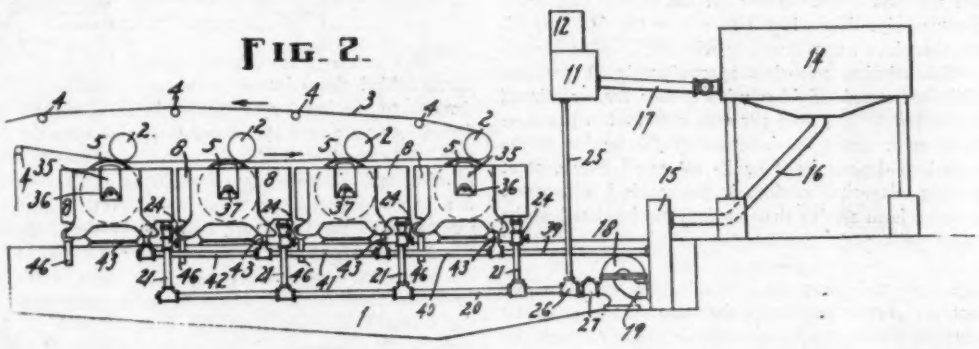
under the associated couch roll 2, said felt passing up and over the right-hand couch roll, all of which is well understood.

It is of the utmost importance to provide means, in a machine of this character, whereby the amount of suction can be controlled and varied, because such suction must be regulated according to the length of the fiber and to the degree of hydration attained in preparing the fiber in the beater. Heretofore it has been the practice to remove the water from the inside of the cylinder mold by the use of a centrifugal pump, a gate valve being placed in the discharge of such pumps, and the suction being regulated by opening and closing such valve according to the freeness of the fiber in the solution. My invention departs widely from this construction and arrangement, as will hereinafter be made plain.

Adjacent to the end of the battery of cylinder units where the endless felt 3 passes up and over one of the couch rolls 2 to return, the same in the present example being the right-hand end of such battery, are located a riffle box, a stuff-box, a head or flow box, and a screen, of any usual and well-known construction, and respectively represented conventionally (as are also the felt 3, couch rolls 2, and supporting rolls 4) at 11, 12, 13, and 14.

In each end of each cylinder vat 8 is a discharge opening 15, such opening having an arcuate bottom edge which would be concentric with the wire-mesh periphery of the adjacent cylinder mold 5, if the same were extended over such opening and also having a radius which is of approximately the same length as that of said periphery, and the flow box 13 in this machine is located below the level of said opening, instead of above such level as in the old type of machine. The flow box is fed from the screen 14 by gravity through a pipe 16. The screen 14 is fed by gravity from the riffle box 11 through a suitable pipe line represented at 17.

FIG. 2.



As is well understood by those skilled in the art, the riffle box 11 is provided for the purpose of thinning down the fibers coming from the stuff-box 12, and to catch sand and other foreign matter that is separated from the fiber by the thinning-down process. The fiber in the stuff-box is diluted with about 92 per cent water, and as said fiber passes to the riffle box the fiber is thinned down with suction water until the solution consists of about 97 per cent water. The fiber solution passes readily through the screen 14 at this consistency, wherein dirt is removed from said solution, and the latter enters the flow box 13 from which box the solution is pumped, instead of flowing by gravity, into the cylinder vats 8. A pump by means of which this result is attained is represented at 18. There is a connection 19 between the flow box 13 and the pump 18. A horizontal pipe 20 leads from the pump 18, and a vertical pipe 21 leads from said first-named pipe to each one of the vats 8, there being the same number of pipes 21 as there is of vats. A compartment 22 is formed by a hollow extension on the side of each vat 8 which is adjacent to the flow box 13, and one of the pipes 21 opens at 23 into the bottom of said compartment near the front end thereof which is closed. The compartment 22 at its rear end communicates with the interior of the vat 8 of which said compartment forms a part, as clearly shown in Fig. 3. A gate valve 24 is provided for each vertical pipe 21. A vertical pipe 25 leads from the pipe 20, at a point between the pump 18 and the first or next adjacent pipe 21, to the riffle box 11, a three-way valve 26 is interposed between the pipes 20 and 25 and controls the flow of solution pumped out of the flow box 13 into said pipes. A check valve 27 is interposed between the pump 18 and the three-way valve 26, to control the amount of solution which is delivered to the three-way valve. Thus there is a line of pipes between the flow box and the vats and riffle box.

The flow box 13 in its present location, and the connected pump 18, the pipes 20 and 21 with the gate valves 24 in the latter, the pipe 25, the three-way valve 26, and the check valve 27 are new features.

At each end of each vat 8 is a hollow extension 28, and such extension is or may be divided into three compartments by means of two sets of sectional wickets 29 and 30, there being two pairs of oppositely-disposed, vertical projections or ribs 31 in said extension to form channels or guides for said wickets. The sections of the wickets 29 and 30 are arranged one on top of the other in their respective channels to form dams that divide the space in the extensions 28 into an intermediate, discharge compartment 32, a flanking return compartment 33, and a flanking waste compartment 34. The height of each dam formed by the wickets 29 and 30 may be increased or decreased by adding additional sections to the top of the wicket or removing sections therefrom.

The central portion of each extension 28 is recessed, as represented at 35, to accommodate suitable bearing members, indicated at 36, for a shaft 37 with which the adjacent mold 5 is provided. The discharge opening 15 in each end of each vat 8 affords communication between the adjacent end of the mold 5, which mold operates in said vat, and one of the associated pair of compartments 32, adjacent portions of the metal collar 10 and felt collar 9 being cut away, as shown in Fig 8, to open a clear passageway from said mold to said discharge opening. A horizontal pipe 38 connects the legs at the bottoms of the two compartments 33 of each vat.

Extending from the flow box 13, above the level of the pipe 20, are pipes 39, 40, 41, and 42, the first of which is in front, and each increasing in length in the order named. The pipe 39 is connected, at the end which is the more remote from the flow box 13, by means of a vertical pipe 43, with the pipe 38 of the right-hand cylinder unit, the pipe 40 is similarly connected with the pipe 38 of the next cylinder unit, the pipe 41 is similarly connected with the third cylinder unit, and the pipe 42 is similarly connected with the last cylinder unit. A gravity feed or flow is obtained by these pipe lines from the compartments 33 through the pipes 38 and 43, and the pipes 39, 40, 41, and 42, to the flow box 13.

Each compartment 34 at the bottom discharges into the pit 1 through an elbow 44, into which said compartment opens at 45, and a vertical pipe 46 extending downwardly from said elbow.

The level of the solution in each vat 8 is represented at 47—47 in Figs. 6 and 7, and the level of the suction or white water inside of each mold 5 and in the compartments 32 is represented at 48 in said views. These levels are regulated and maintained by means of

the forced-feed valves and the heights of the wickets 29 and 30. In the present case these wickets are of the same height. The office of the wickets 30 is merely to take care of the excess if any of water that enters the compartments 32, or the quantity of water that enters said compartments which is over and above that required to pass therefrom into the compartments 33, whereby the required level in the mold 5 is obtained and maintained.

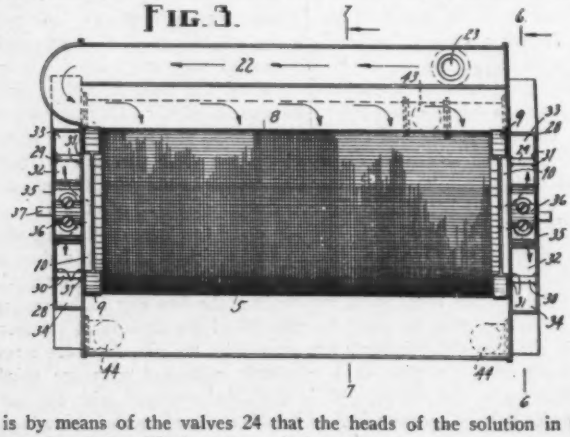
The gravity flow from the molds 5 to the flow box 13 being largely controlled by the wickets 29, although to some extent by the wickets 30, all of which are located between the discharge openings 15 from said molds and said flow box, by putting in or taking out sections of said wickets it is possible to regulate such flow, and the suction incident thereto, with a great degree of exactness. In this connection it will be remembered that the suction is dependent upon the distance between the solution level 47 in the vats and the water level 48 in the molds.

The separate connections (39, 40, 41, and 42) between the cylinder units and the flow box lend themselves to the independent control of the suction in each cylinder mold, when taken in connection with the sectional wickets.

The compartments 33 receive white water from the compartments 32, after such water has risen in said second-named compartments and passed over the tops of the wickets 29, and deliver said water to the gravity-return pipe lines which return it to the flow box 13. In the flow box the white water combines with the solution already in said box, which solution comprises approximately 97 per cent water, as hereinbefore stated. Said solution is now further thinned until it stands at approximately 99½ per cent water, when the same is in condition to come under the influence of the suction in the cylinder units, and to deposit itself or its saturated fiber content readily, or to become deposited readily, on the molds 5 in separate sheets which unite to form a thick sheet at the right-hand end of the battery of cylinder units, or by the time the right-hand couch roll 2 is reached.

The discharge from the pump 18 is divided by the three-way valve 26 so that the greater portion of the same passes on to the vat compartments 22, while a small percentage is forced through the pipe 25 into the riffle box 11. Further control of the solution on its way to the vats is afforded by the valves 24, so that more or less of said solution can be delivered to one vat than to another. And it

FIG. 3.

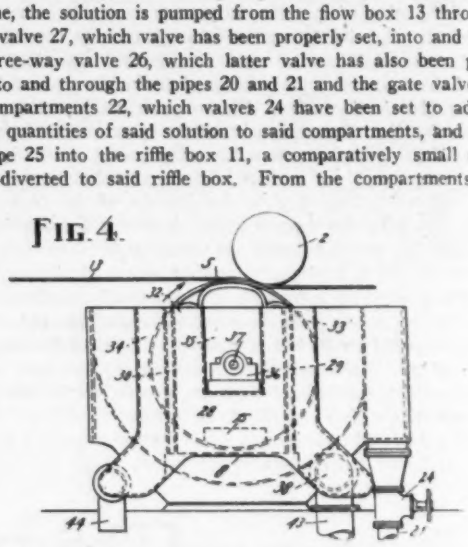


is by means of the valves 24 that the heads of the solution in the vats 8 and the riffle box 11 are balanced.

The 99½ per cent water solution is agitated so thoroughly by the centrifugal pump 18 that the fiber and water are most completely and intimately mixed, consequently, when the fiber therein is disposed on the molds 5, the resulting sheets of paper are "closed up," and they form at or under a higher rate of speed than is possible on the old gravity-flow of 97 per cent water solution machine, wherein the solution is thinned down in the compartments 22 and vats 8.

In the operation of the machine as a whole, or so much of such operation as is dependent on my improved features resident in said machine, the solution is pumped from the flow box 13 through the check valve 27, which valve has been properly set, into and through the three-way valve 26, which latter valve has also been properly set, into and through the pipes 20 and 21 and the gate valves 24 to the compartments 22, which valves 24 have been set to admit the proper quantities of said solution to said compartments, and through the pipe 25 into the riffle box 11, a comparatively small quantity being diverted to said riffle box. From the compartments 22 the

FIG. 4.



force behind the solution carries the same into the vats 8 and through to the interior of the molds 5. The head of the solution forced into the vats 8 by the pump 18 establishes the level 47 in said vats. The revolving molds 5 screen out the saturated fiber from the solution, and the same forms into sheets which pass to the traveling felt 3 to be united into a single thick sheet. The directions of the movement of the felt 3 are indicated by the associated arrows in Fig. 2, and the direction of movement of each mold 5 is indicated by the associated arrow in Fig. 4. The white water left, after the saturated fiber has been deposited on the wire-mesh peripheries of the molds 5, escapes from the ends of said molds by gravity, through the openings 15 in the sides of the vats 8, into the compartments 32, and rises in said compartments, to the level established by the wickets 29, which wickets have been built up to the required height, passes over the tops of said wickets, falls into the chambers 33 and the pipes 38, from which latter said water passes back or returns to the flow box 13 by way of the pipes 43, 39, 40, 41, and 42, the last four pipes being inclined downwardly from said pipes 43 to said flow box. When the white water in the compartments 32 reaches the tops of the wickets 30, which latter also have been built up to the required height, so much of such water as fails to pass over the wickets 29 into the compartments 33 passes over the tops of the wickets 30 into the compartments 34, and from said last-named compartments escapes into the pit 1 by way of the elbows 44 and the pipes 46.

The white water is sucked into the molds 5 by the gravity flow from said molds and the compartments 32 over the wickets 29, due to the fact that the water line 48 is below the solution lines 47, and the amount of this suction is readily increased or decreased by decreasing or increasing the height of said wickets accordingly.

The solution that is pumped through the pipe 25 into the riffle box 11, mingles with the solution in said box from the stuff-box 12, passes therewith through the line of pipes 17 to the screen 14, and through said screen and the pipe 16 to the flow box 13, so that there is a forced circulation from said flow box, by way of said riffle box and said screen, back to said flow box, in addition to the forced outward movement from said flow box through the cylinder units, and the gravity return movement from said units to said flow box.

Arrows in Figs. 3 and 6 indicate the directions of the flow of the solution through each compartments 22 to its vat, and of the white water from each cylinder mold to the associated gravity return and waste.

More or less change may be made in the shape, size, construction, and arrangement of some or all of the parts of this machine, without departing from the spirit of my invention, or exceeding the scope of what is claimed.

What I claim as my invention, and desire to secure by Letters Patent, is:—

1. In a cylinder paper making machine, mechanical means to produce a forced feed from the flow box to the vat, gravity-return return means from said vat to said box.

2. In a cylinder paper making machine, mechanical means to produce a forced feed from the flow box of the vat, gravity-return means from said vat to said box, and means to regulate said gravity-return means.

3. In a cylinder paper making machine, mechanical means to

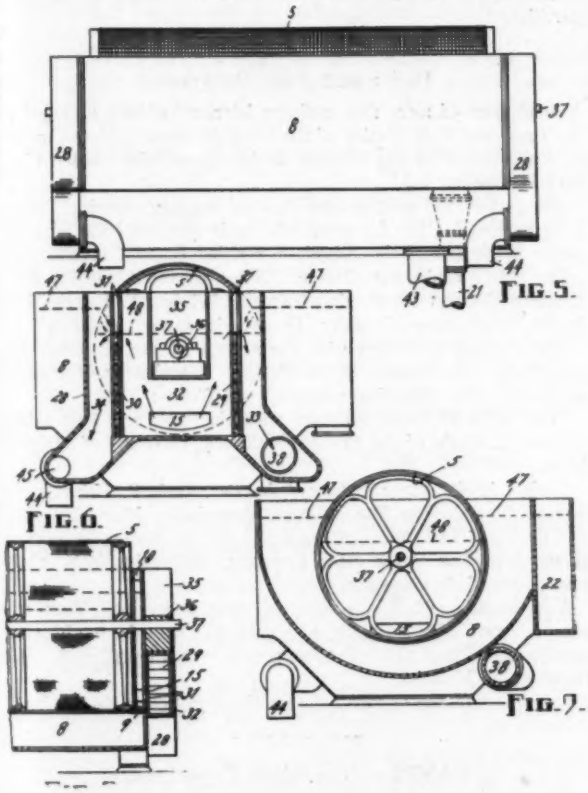


FIG. 5.

FIG. 6.

FIG. 7.

produce a forced feed from the flow box to the vat and the riffle box, and the gravity-return means from said vat to said flow box.

4. The combination, in a cylinder paper making machine, with a flow box, a vat, and a cylinder mold in said vat, of means to force the solution from said box into said vat.

5. The combination, in a cylinder paper making machine, of a riffle box, a flow box, a vat, and a cylinder mold in said vat, of means to force the solution from said flow box into said vat and also into said riffle box.

6. The combination, in a cylinder paper making machine, with a riffle box, a flow box, a vat, pipe connections, and a cylinder mold in said vat, of means to force the solution from said flow box into said vat and also into said riffle box, such means consisting of a pump located in the pipe connections between said flow box and said vat and riffle box.

7. The combination, in a cylinder paper making machine, with a riffle box, a flow box, a vat, pipe lines, and a cylinder mold in said vat, of means to force the solution from said flow box into said vat and also into said riffle box, a three-way valve in the pipe connections between said flow box and said vat and riffle box, and a pump between said flow box and said valve.

8. The combination, in a cylinder paper making machine, with a flow box, a vat, and a cylinder mold in said vat, of a pipe line from said flow box to said vat, a pump in said pipe line to force the solution from said box to said vat, and a valve in said pipe line to regulate the flow into said vat.

9. The combination, in a cylinder paper making machine, with a riffle box, a flow box, a vat, and a cylinder mold in said vat, of a pipe line from said flow box to said vat and said riffle box, a three-way valve in said pipe line between said flow box and said riffle box, a pump in said pipe line between said flow box and said valve, and a valve in said pipe line to control the flow into said vat.

10. In a cylinder paper making machine, a flow box, a vat, a cylinder mold in said vat, an extension into which said mold discharges, the point of discharge being at a higher elevation than said flow box, and controlling means for the discharge, said last-named means being located in said extension.

11. In a cylinder paper making machine, a flow box, a vat, a cylinder mold in said vat, an extension into which said mold discharges, the point of discharge being at a higher level than said flow box, and a sectional wicket in said extension to control the discharge from said last-named means.

12. In a cylinder paper making machine, a flow box, a cylinder mold, and means to discharge by gravity the suction water from the inside of said mold into said flow box, the latter being located below the level of the discharge.

13. In a cylinder paper making machine, a flow box, a cylinder mold, and means to discharge by gravity the suction water from the inside of said mold into said flow box, the latter being located below the level of the discharge, and means to control such discharge.

14. In a cylinder paper making machine, a flow box, a cylinder mold, and means to discharge by gravity the suction water from the inside of said mold into said flow box, the latter being located below the level of the discharge, and removable means to control said discharge.

15. In a cylinder paper making machine, a head box, a cylinder mold, and means to discharge by gravity the suction water from the inside of said mold into said flow box, the latter being located below the level of the discharge and controlling means for said discharge, said controlling means comprising sectional wickets.

16. The combination, in a cylinder paper making machine, with a cylinder mold and a flow box, of gravity means to carry the white water from said mold to said box.

17. The combination, in a cylinder paper making machine, with a cylinder mold and a flow box, of a discharge from said mold which is above the level of said box.

18. The combination, in a cylinder paper making machine, with a flow box, a vat, a cylinder mold in said vat, and an extension into which said mold discharges, of mechanical means to force the solution from said flow box into said vat, and gravity means to carry the white water from the inside of said mold back to said flow box, which latter is below the level of the discharge from said mold.

19. The combination, in a cylinder paper making machine, with a riffle box, a flow box, a vat, a cylinder mold in said vat, and an extension into which said mold discharges, of mechanical means to force the solution from said flow box into said vat and said riffle box, and gravity means to carry the white water from the inside of said mold back to said flow box, the level of the solution in said vat being above the level of the white water in said mold.

20. The combination, in a cylinder paper making machine, with a flow box, a vat, a cylinder mold in said vat, and an extension into which said mold discharges, said extension being provided with means to assist in maintaining the suction water in said mold at a lower level than the solution in said vat, of mechanical means to

force the solution from said flow box into said vat, and gravity means to carry the suction water from said extension back to said flow box.

21. The combination, in a cylinder paper making machine, with a flow box, a vat, a cylinder mold in said vat, and an extension divided into two compartments into one of which said mold discharges, of mechanical means to force the solution from said flow box into said vat, and gravity means to carry the suction water from the other of said compartments back to said flow box.

22. The combination, in a cylinder paper making machine, with a flow box, a vat, a cylinder mold in said vat, and an extension into which said mold discharges, said extension being divided into intermediate, return, and waste compartments, whereby the level of the suction water in the mold is maintained at a lower level than that of the solution in the vat, of mechanical means to force the solution from said flow box into said vat, gravity means to carry the suction water from said return compartment back to said flow box, and gravity means for the discharge of the suction water from said waste compartment.

23. In a cylinder paper making machine, a flow box, a vat, a cylinder mold in said vat, a gravity discharge for the suction water from said mold to said flow box, which latter is located below the level of said discharge, and means to produce a forced feed to said vat from said box.

24. In a cylinder paper making machine, gravity discharge means for the suction water from the mold to a flow box located below the level of the discharge, means to produce a forced feed of the solution from the flow box to both the vat and the riffle box, and a check valve, three-way valve, and gate valve to control such feed.

25. The combination, in a cylinder poper making machine, with a vat, a forced feed for said vat, a cylinder mold in said vat, and a gravity discharge for the suction water from the inside of said mold, of means to maintain a uniform level of solution in said vat and rid the cylinder unit of surplus water.

26. The combination, in a cylinder paper making machine, with a vat, a forced feed for said vat, a cylinder mold in said vat, and a gravity discharge for the suction water from the inside of said mold, of means to maintain a uniform level of solution in said vat and rid the cylinder unit of surplus water, such means consisting in part of gravity overflow means.

27. The combination, in a cylinder paper making machine, with a vat, a forced feed for said vat, a cylinder mold in said vat, and a gravity discharge for the suction from the inside of said mold, of removable overflow means to assist in maintaining a uniform level of solution in said vat, and rid the cylinder unit of surplus water.

28. The combination, in a cylinder paper making machine, with a vat, a forced feed for said vat, a cylinder mold in said vat, and a gravity discharge for the suction from the inside of said mold, of adjustable overflow means to assist in maintaining a uniform level of solution in said vat, and rid the cylinder unit of surplus water, such overflow, means comprising a sectional wicket.

29. The combination, in a cylinder paper making machine, with a vat, a cylinder mold in said vat, and an extension at the end of said vat, of means in said extension to divide the same into compartments into one of which the discharge from said mold is received and into the other of which such discharge flows away after passing over the dividing means.

30. The combination, in a cylinder paper making machine, with a vat, a cylinder mold in said vat, and an extension at one end of said vat, of means in said extension to divide the same into compartments, into one of which compartments the discharge from said mold is received, into another of which compartments such discharge flows away after passing over one of the divisions, and into still another of which compartments the overflow escapes over the other division.

31. The combination, in a cylinder paper making machine, with a vat, a cylinder mold in said vat, and an extension at the end of said vat, said extension being provided with guides, of removable members in said guides adapted partially to divide said extension into a compartment to receive the suction water from said mold, and into a compartment to receive said water from said first-named compartment, after the same passes over the top of said removable members.

32. The combination, in a cylinder paper making machine, with a vat, a cylinder mold in said vat, and an extension at the end of said vat, said extension being provided with guides, of removable members in said guides to form partitions which partially divide said extension into a receiving compartment for the white water from said mold, a compartment into which such water escapes over the top of one of said partitions, and a compartment into which the waste portion of such water escapes over the top of the other partition.

TECHNICAL SECTION, PAGE 103

Paper and Pulp Program

A program of more than ordinary interest has been arranged for the Paper and Pulp Section of the Twelfth Annual Safety Congress of the National Safety Council to be held at the Statler Hotel, Buffalo, October 1-5.

The section will meet at 10 o'clock on Tuesday morning, October 2, in Parlor B. The following will be in charge of the program: Adam Wilkinson of the American Writing Paper Company, Holyoke, Mass., chairman; George Phillips of the Champion Fibre Company, Canton, N. C., vice-chairman; William F. Dewey of the B. D. Rising Paper Company, Housatonic, Mass., secretary.

The meeting will open with the reports of the chairman, secretary and committees. A nominating committee will then be appointed. The following addresses will follow:

"The Value of Physical Examinations in Paper and Pulp Mills," by Seth L. Bush, of the Crocker-McElwain Company of Holyoke, Mass.

"Safety in the Paper Industry," by Dr. Hugh P. Baker, secretary of the American Pulp & Paper Association, New York City.

"The Paper and Pulp Mill Safety Code," by Robert M. Altman of the Marathon Paper Mills Company, Rothschild, Wis., chairman of the Code Committee.

A discussion will follow each of these addresses. Then will come a round table on paper and pulp mill hazards, touching especially on "Prevention of Slipping on Wet Floors" and "Safe Handling of Material."

The report of the nominating committee will close the session.

TAPPI at Chemical Exposition

In accordance with the practice that has been in effect for a number of years a meeting will be held during the Chemical Industries Exposition at the Grand Central Palace, New York, on September 20 at two-thirty P. M., under the auspices of the Technical Association. A number of the exhibitors at the Exposition have arranged to present short papers on subjects which have a relation to the pulp and paper industry.

The program that has been arranged includes the following:

The Attitude of Men Toward Education Opportunities in Pulp and Paper Mills, T. L. Crossley.

The Standardization of Paper by Test, Hubb Bell.

Application of the Cottrell Electrical Precipitator to the Pulp and Paper Industry, N. W. Sultzer.

Preparation of Bleach Liquor with Liquid Chlorine, J. H. MacMahon.

The Mining of Sulphur, R. F. Bacon.

Sodium Silicate in the Paper Mill, J. G. Vail.

Howard S. Taylor, president of the Technical Association, will preside.

EXAMINATION QUESTIONNAIRE ON PAPER MAKING

Following are the questions set for the 1923 examinations in paper manufacture of the City and Guilds of London Institute:

Grade I.

Not more than *eight* questions to be attempted.

1. Give sketches of the following fibers as they appear under the microscope:—Jute, esparto, straw, sulphite, spruce and soda aspen.
2. Describe briefly the construction and use of the breaker.
3. Using the same furnish of linen rags, what difference would you expect to find in the finished sheet, if you treat in the beater (*a*) with sharp knives and quickly lower the roll on the bedplate; (*b*) with dull knives and lower the roll more gradually?
4. How would you deal with the back waters of (*a*) a fine white printing mill; (*b*) a mill making heavily colored paper?
5. In a paper for which a clearly defined watermark is essential, would you prefer the stock to be free or wet? Give your reasons.
6. What are suction boxes? By what methods may vacuum be created in the suction boxes of the paper machine?
7. What are the principal features required in a body paper for coating?
8. Describe the process of tub-sizing. To what papers is this process usually applied?
9. A high finish is required in a super-calendered printing; Describe a suitable machine for damping the paper, and explain why it is not usual to leave the paper damp from the cylinders, so saving steam and labor.
10. What is understood by air-dry pulp? How would you determine the air-dry contents of a parcel of 50 per cent air-dry moist mechanical pulp?
11. What is superheated steam? Are any advantages to be obtained from its use in a paper mill?
12. Give a sketch of a single cylinder (Yankee) machine.

Final Examination

Questions 1, 2, 3 and 4 of Section A are obligatory. Not more than four other questions may be attempted.

Section A (Papermaking)

1. In what fundamental respects does the papermakers' cellulose obtained from cotton rags differ from that obtained from (*a*) straw; (*b*) hemp?
2. Discuss the theory of bleaching processes as applied in the paper mill, and indicate the principal conditions affecting the economy of the operation.
3. Discuss the relative merits of sulphate and sulphite pulp, and state why any difference should exist in fiber material prepared from the same wood.
4. What advantage does a papermaker who makes his own pulp possess over a competitor who imports his material in the ordinary way?
5. What tests can be applied to beater stock in order to follow the progress of beating? Draw up a plant for systematic records in regard to the preparation of the stock for the paper machine.
6. In what classes of paper would you prefer to use aspen mechanical pulp rather than pine pulp? State your reasons.
7. Draw up a scheme for the production of any class of paper you care to select. Schedule the duration of the various operations that you would employ, and state the proportions of the ingredients necessary.
8. Assuming that you were called upon to take charge of a paper mill, how would you endeavor to effect economies in the use of water?
9. What precautions are necessary when using granite press rolls?
10. What advantages can you see in the making of bleach liquors from liquid chlorine as against the use of ordinary bleaching powder?
11. How would you deal with the back waters and the waste waters from a fine writing mill situated on a river where strict regulations against pollution are in force?
12. Describe any methods of automatically regulating the supply of live steam to the paper machine.

Section B (Engineering)

13. Discuss the value of heat accumulator systems as applied to paper mill practice.
14. What do you consider to be the best insulating material for the covering of steam pipes? What percentage of the loss of heat occurring in an uncovered range of pipes would you expect to save by using such a material to the best advantage?
15. Draw up a complete scheme for the control of operations in the steam boiler house.
16. Discuss the relative merits of reciprocating and rotary pumps for vacuum production on the paper machine.
17. What factors influence the deterioration of coal when stacked in large quantities in the open?
18. Describe the principal features of (a) high-pressure condensing, (b) mixed pressure, (c) pass-out of bleeder steam turbines of combined impulse and reaction type. What are the advantages of each for particular purposes in paper mill work?
19. Why are electric generators driven by steam turbines more usually "alternate current" than "direct current"? Which form of supply is most generally useful in the paper mill, and why? What several means may be employed for using the power given out at high speed by a steam turbine for driving slow-speed machinery?
20. Discuss the relative merits of mechanical and electrical driving as applied to the paper machine.

Section C (Chemical)

21. Give a sketch of and describe the following paper-testing machines: Schopper, Marshall, Mullen. Discuss their relative merits.
22. A parcel of 1,200 bales of soda pulp, invoiced as 150 tons, has been received. Twenty-five bales, which weighed 3 tons 3 cwts. 3 qrs., were sampled. The weight of the sample when drawn was 868 grams., and when bone dry 775 grams. What is the correct quantity of air-dry pulp in the parcel?
23. By what methods would you control the boiling of rags with caustic soda, and ascertain the best conditions of treatment for a specific purpose?
24. What is the influence of alum upon gelatine, before and after its application to paper?
25. How would you estimate the percentage of caustic soda (NaOH) left in lime sludge after causticising soda ash or recovered soda?
26. Draw up a scheme for the control of the chemicals and chemical processes used in a mill producing high grade esparto papers.
27. How would you detect the presence of copper and iron specks in a sheet of paper?
28. What are the principal causes of the deterioration of paper? Give an account of the chemical changes which take place in effects referred to in your answer.

Shartle Elected Bank Director

Middletown, Ohio, September 12, 1923.—Charles W. Shartle, Sr., has been elected a director of the First and Merchants National Bank of this city. Mr. Shartle is president of Shartle Brothers Machine Company, manufacturers of paper mill machinery; head of the Middletown Machine Company and is interested in the Lomar Shock Absorber Company.

AUSTRALIAN PAPER SUPPLY

The Commonwealth Institute of Science and Industry, a Government institution, has been conducting important investigations into the possibilities of manufacturing paper pulp in Australia, which at present is almost entirely dependent upon foreign sources. The results of these investigations are embodied in a bulletin by Mr. L. R. Benjamin, and published under the authority of the Director of the Institute, Sir George Knibbs.

According to this bulletin Australia's requirements in all kinds of paper and cardboard amount to nearly 150,000 tons a year. In 1921 nearly £7,000,000 was paid for the 120,000 tons imported, and there were about 30,000 tons made locally. About 70,000 tons of news print paper is needed yearly, not a pound of which is made locally, and at the present rate of increase there will probably be needed 100,000 tons of newspaper in 1933. For other printing purposes nearly 14,000 tons of much better quality paper per year is required, less than 2,000 tons of which is made in Australia, and almost entirely from imported pulp. For paper bags and other wrappings nearly 20,000 tons a year is needed, less than half being made in the Melbourne and Sydney mills from imported pulp and local waste materials, such as jute bagging, old ropes, etc.

Most of the 26,000 tons of cardboard which is made into boxes and containers for hats, shoes, soft goods, groceries, etc., is manufactured by three mills in Victoria and one in Sydney, from straw and waste paper, but very little of the 6,000 odd tons of writing, typing and envelope paper used is made in the local mills at the present time. Excepting the low-grade straw pulp used in cardboard, Australia does not manufacture any paper pulp at all.

It is pointed out in the bulletin that an analysis of forest conditions abroad, and consideration of the rapidly-increasing demand for wood pulp indicate that within the next decade or two Australia will probably be faced with a serious shortage of, and consequent high prices for paper and paper making materials now imported. Before the investigations there had not been any systematic inquiry into the resources of Australia from the pulping point of view, nor had any attempt been made to clear up the technical difficulties which caused certain experts from abroad to report unfavorably upon Australian woods, The Institute approached the problem with a view to throwing light upon the causes of these difficulties, and the results are explained in the bulletin as follows:—

The causes were eventually ascertained, and by the application of simple chemical principles, the difficulties of securing a high yield of strong pulp from our most important woods have been overcome. The modified chemical process developed in the Institute's laboratory, and, later, confirmed on a semi-commercial scale, gives 60 per cent more pulp from a given quantity of wood, and it requires a smaller quantity of chemical, less fuel, and fewer men to produce a ton of pulp by this process than by the methods which caused earlier investigation to report unfavorably on the same wood.

If this process had been applied to the wood investigated for the Tasmanian Government at Hobart in 1915 by an American expert, the cost of production would have been found to approximate £7 per ton instead of £12 per ton as then estimated. As the market value of the pulp at the time was £10 to £11 per ton, the prospect of making a commercial success of the pulping of Tasmanian woods would have been good. Although conditions have changed since 1915 and pulp of a similar nature is now worth £18 to £20, the cost of production should permit of a profit being made on the pulping of the same woods at the present time.

The laboratory experiments established that the average cellulose contents of the eucalyptus and the majority of other woods investigated was not lower than that of the standard pulp woods of other countries. These results were confirmed by experiments made in a paper mill in Victoria, a part of which was placed under the control of the Institute. The yield of screened pulp was high, ranging from 45 to 47 per cent for the most important wood and 10 to 14 per cent of standard (35 per cent) bleached was required to raise the commercial degree of whiteness. All the woods gave a higher yield per cord than poplar or spruce. The output per unit of digester space would be 40 to 60 per cent greater than the average now prevailing in the soda-pulping industry of U. S. America. The mill scale tests in paper making gave the following results:—

That mixtures containing 60 per cent to 70 per cent of eucalyptus pulp would be run on the machine without difficulty, provided that suitable precautions were taken in beating the stuff.

That in nearly every case papers made under these conditions were considerably higher in bursting and tensile strength than papers made almost entirely from spruce sulphite pulp beaten for the same period.

Superior capacity and a good finish in addition to more than average strength may be expected from the use of mixtures containing about 60 per cent of well-prepared eucalyptus pulp. There is less shrinkage in drying than with paper containing a high proportion of sulphite pulp. It is claimed that well-prepared eucalyptus will be of the greatest use in making better grade printings, books, magazines, maps, cartridge, and the cheaper grades of writing and typing papers.

The conclusions in regard to economic conditions arrived at by Mr. Benjamin are that the rate of growth in Australia of eucalyptus to reach pulp wood size is from eight to fifteen years, whereas spruce and other pulp woods require forty years of growth. Suitable labor is available for operating pulping plants, and the cost would be no higher than in North America. Cheap power is already available in Tasmania, and will soon be ready in Victoria.

The cost of manufacturing ten tons of air-dry bleached pulp, by a plant of that small capacity, per day is estimated at a little less than £13 per ton, based on prices of wood 40s. cord (one cord equals 100 cubic feet), fuel 30s. ton, soda ash £10 ton, salt £4 ton, lime 25s. ton, power 0.5d. per kw. hour, a minimum wage of £4 5s. per week. The total cost is put at:—Preparing stock £6, conversion £4 2s., and overhead charges £2 12s. per ton. With a larger plant the overhead expenses would be considerably less per cent, and so it is thought it might be possible to reduce the prime cost to £10 per ton, as against an estimated cost of foreign pulp at £15 and its conversion into paper at £7 per ton.

In Tasmania and Victoria alone, it is pointed out, there is sufficient standing pulp wood to meet the constant demands of a news print industry capable of supplying the requirements of all the news print users of Australia.

The bulletin itself is printed on paper containing 60 per cent of chemical pulp from Australian eucalyptus, 30 per cent of imported chemical pulp, and 10 per cent of waste paper.—*Manchester Guardian.*

Aids Austrian Paper Industry

WASHINGTON, D. C., September 12, 1923.—A German paper manufacturer and dealer Hofrat William Hartmann, who has recently been to America, says that he has accomplished much for the Austrian paper industry, commercially as well as financially, according to a report received by the Paper Division of the Department of Commerce from Trade Commissioner Upson at Vienna. With the assistance of Mr. Warburg, the New York banker, a financial consertium has been arranged and a dollar loan will be made for the purpose of developing the water power projects of the Austrian paper mills of the Laykam-Josefsthaler A. G. Another dollar loan will be raised and placed at the disposal of the Hencjek von Donneramark'sche Zeullulose und Papier-Fabrik at Frantschach in Carinthia, for the purpose of developing the water projects of that company.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

PLANT ACCOUNTS IN INVESTED CAPITAL*

By Lee Perkins

The use of invested capital in the calculation of federal taxes was intended to remove what might otherwise have been a discrimination between the business making a relatively large income through small investment and the one making a similar income on a large investment. It was felt that the latter should not pay so large a tax as the former, so a portion of the income, depending upon the amount of invested capital, was exempted from the profits taxes.

Objections to Profits Taxes

The most serious objections to the profits taxes have not been because of their high rates, burdensome as these have been, for they have been passed on very successfully. The difficulty has been in determining what the taxes were going to be soon enough to pass them on completely. Many enterprises have faced heavy additional assessments on income earned two and three years ago, to be paid in these lean years when it is proving difficult to keep the business alive.

The determination of gross income has been relatively easy, and the determination of allowable deductions from income has not been difficult. The determination of invested capital, however, has been fraught with many pitfalls, and seldom will two men agree as to what should be allowed. In this determination of invested capital no group of accounts has caused more trouble, and furnished more hidden opportunities for the assessment of additional taxes, than that of machinery, buildings and other fixed assets.

Accounting Developed by Bankers

Accounting was first developed by the bankers and much of it is to-day under their control and guidance. With so large a part of the bankers' assets in the form of cash or securities readily convertible into cash, and their business health so dependent upon this readiness of conversion, they began at an early date to disregard the values in their fixed assets, and to confine their attention to current assets readily convertible into cash. Bank fixtures and even buildings were written down to insignificant figures or to nothing, and the business man and manufacturer, dependent largely on the banker for his opportunity to expand, imbibed his ideas and copied his practices.

The conservative business organized twenty to thirty years ago put its first machinery and buildings on its books, but as it developed and expanded, additions and improvements were buried in operating accounts and closed off against earnings. To exhume them to-day is usually difficult and sometimes impossible. Coincident with this writing of plant assets, the theory of depreciation was well-nigh discredited, or it was at least decided that the repairs, renewals and replacements, as well as improvements, charged against earnings. provided more than enough margin of safety. This indeed it did, to the sorrow of the owners when facing profits taxes.

As though the plant accounts were not already too low, revenue agents, in verifying the correctness of the taxpayer's determination of taxes, have analyzed his plant accounts, accumulated the additions thereto year by year, and depreciated them throughout their life at the rather heavy rates that have been so freely used for deductions in the years of heavy taxes. This has usually been done without any attempt by the inspector to analyze the expense accounts of the early years to restore the many additions and improvements which were charged off, frequently, in fact, impossible of identification. The result has been theoretically, and on the inspector's schedules actually, to wipe out all of the early investment in plant, which in reality either still exists or has been replaced in kind by far more costly equipment.

The remedy for this situation is an exhaustive study of the accounts into which the cost of plant items may have disappeared and a strenuous effort to restore them. As the success in doing so usually returns, in the way of reduction of additional taxes from fifteen to twenty per cent of the amount restored, when the years 1917 to 1921 are involved, the search is thoroughly worth while.

Setting Forth the Additions

In this search for plant assets charged off, and the preparation of a claim for their inclusion, the easiest items to discover and the easiest concerning which to convince the treasury department as to their place in invested capital are the additions. This is not difficult if purchase invoices have been preserved. The Schedules setting forth these additions should give a brief description of the items, the vendor, the date and page number of the book of entry, and the account to which each item was originally charged.

If the books have been kept as outlined, it will usually be found that even for such additions as have been charged to plant accounts the cost of installation, freight and cartage, and the cost of accessory equipment have all found their way into loss and gain accounts buried in operating expenses. To segregate and restore such items is difficult and is frequently the result of the combined efforts of the accountant and engineer.

The cost of installation, chiefly labor, must ordinarily be estimated, but to be accepted it must be estimated on a sound basis displayed in much detail. The actual cost of the labor, or even the

Cost Section

* From the "Journal of Accountancy."

labor hours, of installation throughout the period covered will not often be available. Frequently the labor hours of recent similar installations may be taken from time tickets, or this information may be obtained from the experience of the manufacturers or it may be carefully estimated. A table of the labor rates in effect during the various years compared with current rates will give the variation in installation costs by years.

Freight charges will be the product of weight and rates. It is improbable that the freight bills, even if preserved over a long period, can be identified with the items of additions sufficiently to insure the inclusion of all of them. It will be necessary to obtain the weights from manufacturers or to estimate them carefully. The rates must be taken from freight bills at the time, if available, or obtained from the railroads. Cartage may be estimated from labor and other rates current during the years involved, compared with current cartage bills.

Betterments and Improvements

Betterments and improvements present the hardest problem, as long after an installation it is difficult to estimate the portion of an improvement that is a proper charge to plant accounts and the portion that adds no value but merely replaces old construction displaced. The disposition of this latter portion, replacing old construction, would be a charge either to operating costs as obsolescence or to a reserve for depreciation because restoring accumulated deterioration for which the reserve was provided. These charges against the reserve have the effect of increasing invested capital without themselves being subject to depreciation in subsequent years.

Replacements may usually be included as additions. This does not conform to sound accounting, as they or the cost of the asset they replace would be charged against reserves, except for the usual element of betterment involved, but the methods of the department justify their treatment as additions. This is because in building up plant accounts, and assuming an estimated life, the additions for each year are eliminated from both the total of the assets and the accumulated reserve at the end of this estimated life. There is therefore no occasion to eliminate the cost of a specific asset when replaced. It is immaterial that the actual replacement does not occur at the time of theoretical expiration, as in estimating the life of the group it is assumed to be merely an average.

Allowance Added to Assets

Frequently an allowance for old machinery displaced is made by the vendor and deducted from the face of the invoice for replacements. Even when charged to plant accounts such replacements will usually be found to be entered net after deducting the allowance. In restoring the accounts for invested capital purposes the amount of the allowance should be added to the assets and also to the reserve for depreciation. That it should be added to the assets is obvious as the entire cost of the items replaced will be eliminated at the end of their theoretical life. The addition to the reserve is to avoid increasing invested capital through such items and to offset the excessive elimination from the reserve. The advantage, even though there is no increase in invested capital, lies in the increase in the basis on which depreciation will be calculated in the years of heavy taxes. This assumes that such gain will exceed the loss in the interim through reduction in invested capital from depreciation taken on the restored allowance, which will depend to some extent upon the length of this interim and the depreciation and tax rates.

Concerning Depreciations

The federal tax laws, somewhat inconsistently, permit depreciation to be included in expense based on fair values March 1, 1913, although such values are not a factor in invested capital. The excess of depreciation based on fair values March 1, 1913, over depreciation based on cost may be restored to invested capital if charged on the books as expense. Ordinarily this portion of the depreciation will be credited to a special reserve, "realization of appreciation," which will be treated as a surplus reserve.

The rate of depreciation applied to the fair value March 1, 1913, usually an appraisal value, should be derived from the rate applied to the assets at cost as used in developing invested capital. This is illustrated in the accompanying table. If on a certain class of assets we use a depreciation rate of 10 per cent. based on cost, equivalent to a life of ten years, additions to plant accounts acquired in 1902 (depreciated from the beginning of 1903) will have been depreciated for ten years by the end of 1912, will theoretically have no remaining life thereafter, and the cost will be eliminated from the assets and from the reserve. Assets required during 1903 will have one year remaining life after 1912; assets purchased in 1904 will have two years remaining life, etc. The average remaining life of the entire group will depend upon the relative amounts of additions in the various years.

Computing Life of Assets

This average remaining life may be obtained by multiplying the cost of additions of each year not yet eliminated by the remaining life of the assets purchased that year, adding these products, and dividing by the sum of the cost of assets not eliminated. This will give the average remaining life from the end of 1912 of the assets on hand at that date. Deducting two months, or one-sixth year, the remainder is the average remaining life March 1, 1913, and when converted into depreciation rates may be applied to the fair values March 1, 1913.

The average remaining life March 1, 1913, may be obtained by a shorter and simpler method than described above. We may assume that the amount of depreciation for the year 1913 as determined on the invested capital schedule of plant accounts on the basis of cost is the same depreciation we would obtain based upon the net depreciated value at the end of 1912 derived from cost, using a depreciation rate corresponding to the average remaining life at that date.

Must Correspond to Assumed Life

Therefore if we divide the net depreciated value as shown on the invested capital schedule of plant accounts at the end of 1912 by the depreciation for 1913, we obtain the average remaining life of all the assets theoretically on hand at the end of 1912, which corresponds to the assumed life from date of purchase used in the preparation of the invested capital schedule. A deduction of two months gives the average remaining life as at March 1, 1913, and will be considered the average remaining life of the assets included in an appraisal as at March 1, 1913, if available, on which the depreciation included in expense will be based.

THEORETICAL DEVELOPMENT OF PLANT ACCOUNT FOR INCLUSION IN INVESTED CAPITAL

(A separate schedule would be developed for each class of assets)

Year ended Dec. 31st	Additions during year	Total additions at end of year	Total expirations to end of year	Balance of assets at end of year basis of dep'n following years	Depreciation for year at 10%
Balance, Jan. 1, 1900..	.....	$102,090	.....	$102,090	.....
1900.....	4,720	106,810	.....	106,810	$10,209
1901.....	2,100	108,910	.....	108,910	10,681
1902.....	3,410	112,320	.....	112,320	10,891
1903.....	7,820	120,140	.....	120,140	11,232
1904.....	1,480	121,620	.....	121,620	12,014
1905.....	5,170	126,790	.....	126,790	12,162
1906.....	6,900	133,690	.....	133,690	12,679
1907.....	2,180	135,870	.....	135,870	13,369
1908.....	3,470	139,340	.....	139,340	13,587
1909.....	9,180	148,520	$102,090	46,430	13,934
1910.....	2,710	151,230	106,810	44,420	4,643
1911.....	1,420	152,650	108,910	43,740	4,442
1912.....	8,790	161,440	112,320	49,120	4,374
1913.....	5,130	166,570	120,140	46,430	4,912
1914.....	2,960	169,530	121,620	47,910	4,643
1915.....	7,680	177,210	126,790	50,420	4,791
1916.....	3,430	180,640	133,690	46,950	5,042
1917.....	5,160	185,800	135,870	49,930	4,695
1918.....	7,910	193,710	139,340	54,370	4,993
1919.....	2,860	196,570	148,520	48,050	5,437
1920.....	5,610	202,180	151,230	50,950	4,805

	Total Depreciation to End of Year	Total Expirations to End of Year	Reserve for Depreciation End of Year	Net Assets
Balance, Jan. 1, 1900.....	.....	.....	.....	.....
1900.....	$10,209	.....	.....	.....
1901.....	20,890	.....	.....	.....
1902.....	31,781	.....	.....	.....
1903.....	55,027	.....	.....	.....
1904.....	43,013	.....	.....	.....
1905.....	67,189	.....	.....	.....
1906.....	79,868	.....	.....	.....
1907.....	93,237	.....	.....	.....
1908.....	106,824	.....	.....	.....
1909.....	120,758	$102,090	$18,668	$27,762
1910.....	125,401	106,810	18,591	25,829
1911.....	129,843	108,910	20,933	22,807
1912.....	134,217	112,320	21,897	27,223
1913.....	139,129	120,140	18,989	27,441
1914.....	143,772	121,620	22,152	25,758
1915.....	148,563	126,790	21,773	28,647
1916.....	153,605	133,690	19,915	27,035
1917.....	158,300	135,870	22,430	27,500
1918.....	163,293	139,340	23,953	30,417
1919.....	168,730	148,520	20,210	27,840
1920.....	173,535	151,230	22,305	28,645

Making Use of Appraisals

The use of appraisals as at March 1, 1913, as the basis for depreciation charges in expense is well established if the appraisals were taken at or about that date. In the published rulings of the bureau of internal revenue are cases wherein appraisals of real estate taken a year later than the date at which it was priced have been accepted. Appraisals taken at a later date but priced as at March 1, 1913, or any other earlier date must be well supported by collateral evidence to be allowed.

In using an appraisal taken at a later date, but valued as at March 1, 1913, items purchased during the intervening period must be eliminated. If the books have been poorly kept as to plant accounts it is sometimes difficult to convince the treasury department that this can be done properly.

Pricing buildings and machinery at reproductive cost as at any date not too remote is not difficult, as the appraisal companies have the necessary data recorded at that time. Determining the condition and the accumulated depreciation as at an earlier date, however, is more difficult, and upon the satisfactory accomplishment of this rests the value of appraisals as at an earlier date taken to-day for the purpose of reducing taxes. If a satisfactory solution is possible, the treasury department must accept such recent appraisals in order that there be no discrimination against those who were not so fortunate as to have had an appraisal made about March 1, 1913.

As mentioned earlier, the date March 1, 1913, has no significance in calculations of invested capital, but in certain circumstances appraisals as at dates prior to March 3, 1917, may be used as the foundation of plant accounts in invested capital. When a partnership or single proprietorship was incorporated, or two separate corporations were consolidated in a new corporation, prior to March 3, 1917, the plant assets (and other assets subject to other limitations of the law, such as intangibles) may be included in invested capital at their fair cash value at the time of such reorganization.

If a new company was organized and the assets and business of a single predecessor company were transferred to the new company, the plant assets (and other assets as above) may be included in the invested capital of the new company at their fair cash value at the time of such reorganization only if in the reorganization there has been a distinct change of entity.

Where There is Change of Entity

This department does not specify what constitutes such a change of entity, merely stating that there may be such a change even though there is no change in capital or stockholding, although substantial changes in either would seem to be the soundest indication of a change of entity. The department has ruled that mere reincorporation in a state other than that in which originally incorporated, in order to avoid objectionable laws, would not be considered as constituting a change of entity.

Appraisals allowed at reorganizations as indicating the cost of the plant assets, or the amount of paid-in surplus in connection therewith, are allowable at no other time than when the assets are acquired by the company, and are allowable subsequent to March 3, 1917, the date of enactment of the first excess-profits-tax based upon invested capital only when there is a change of interest in such assets of more than 50 per cent.

Simplification Answers Lagging

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., September 12, 1923.—The report on paper simplification which was sent out by the Simplified Practice Division of the Department of Commerce to 150 paper manufacturers has not been answered up to the present time to the satisfaction of officials of the division.

Only 26 answers have been received out of 150 letters sent out, of which 16 paper men have accepted the recommendations made at the last conference without question. Ten other paper houses had comments to make and suggestions before they would accept the simplified practices as suggested.

William A. Durgin, chief of the section, intends to be present at a number of conventions this fall, at which he will present the paper simplification program. These conventions include one at Briarcliff Manor, N. Y., on September 18 of the National Publishers Association; the American Paper & Pulp Association convention October 11 at Chicago; the Associated Business Papers convention at Chicago October 15; Direct Mail Advertising Association convention October 24 at St. Louis; and Associated National Advertising convention at Rye, N. Y., November 12.

Interstate Commerce Hearing

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., September 12, 1923.—The Interstate Commerce Commission has announced that a hearing will be held on September 17 at St. Louis before Examiner Flynn of the commission in Case No. 14,985 of the American Paper Products Co. against the Atchison, Topeka & Santa Fe, et al.

The commission has also issued an announcement stating that it has permitted amendment in this case.

DETERMINATION OF AVERAGE REMAINING LIFE, MARCH 1, 1913

Year	Additions	Remaining Life Dec. 31, 1912	Product
1903.....	$7,820	1	$7,820
1904.....	1,480	2	2,960
1905.....	5,170	3	15,510
1906.....	6,900	4	27,600
1907.....	2,180	5	10,900
1908.....	3,470	6	20,820
1909.....	9,180	7	64,260
1910.....	2,710	8	21,680
1911.....	1,420	9	12,780
1912.....	8,790	10	87,900
	$49,120		$272,230

$$\frac{\$272,230}{\$49,120} = 5.54 \text{ years' average life from Dec. 31, 1912}$$

.17 years (2 months) to March 1, 1913

5.37 years' average life from March 1, 1913

Alternate method of calculation

Net assets Dec. 31, 1912.. $27,233

Dec'pn. for 1913..... $4,912

$$\frac{\$27,233}{\$4,912} = 5.54 \text{ years' average life from Dec. 31, 1912}$$

.17 years (2 months) to March 1, 1913

5.37 years' average life from Mar. 1, 1913

SERVICE AND SELLING

(*Continued from page* 45)

The Board if it sees fit, may by notice, compel the accused to appear and testify, and to produce such of his books and papers as the Board may direct. Such member being so notified to appear and testify, or to produce books and papers, shall be under obligation to appear and answer all questions and to produce all books and papers which the Board may deem relevant and proper. Written notice signed by the Secretary and the Exchange, requiring the accused to appear and testify, or to produce books and papers served personally upon the accused or sent by registered mail to his usual place of business, at least ten days before such trial, shall be sufficient notice under this section.

Analysis of Above Rules

Let us consider just what this means. If it means what the words apparently imply, it would seem that any member can make an accusation against another, which might necessitate his divulging confidential information in order to clear himself. As will be seen, one section explicitly states, that even if there is only suspicion without any accusation, an investigation may be made, and moreover, that during this investigation, the one against whom suspicion is directed, may be called upon to produce any books and papers required by the Board or Investigating Committee appointed by the Board.

Personally I fail to understand how disputes could be settled without any such provisions, when trading is conducted on "an Open Exchange." That provisions must be made for the final settlement of all disputes cannot be denied and the possibility of disputes arising when dealing with fabricated products is of course, much greater than when dealing with raw materials, which can be "graded" fairly accurately without too much difficulty. But granting the necessity for thus making arrangements for the settlement of such disputes, one is obliged to consider very carefully the results of such investigation. In other words, manufacturers joining such an Exchange, must necessarily be willing to place themselves in a position where they will be obliged should any other member make an accusation against them, or even if suspicion is entertained against them, to divulge information regarding their business which may be of vital importance to them. Should they refuse to give such information, they would be liable to expulsion from the Exchange, which could not but have a deterrent effect on their standing in the industry once they joined the Exchange.

On the Question of "Service"

This is undoubtedly one of the bad features of such a method of selling. There remains another important point, which should be carefully considered by anyone contemplating disposing of their products through this medium, also by those considering making their purchases in this manner, and that is the question of *"Service."* It is unquestionably becoming more and more recognized, that this industry must carry on an educational propaganda for the purpose of instructing the public generally as to "Papers and Purposes." For what purpose is the paper to be used? That is the question that a good salesman asks first, of anybody whom he suspects is not well grounded in paper lore, and then proceeds to do his utmost to sell that prospect the right quality of paper for the purpose stated.

An Exchange is inanimate. You go in and make your purchase, and there the matter ends. It is final, except that if you are not satisfied you may make a complaint, which will be investigated. Judging from the results of investigations made by those Exchanges at present operating, it is very doubtful whether without a great deal of trouble, you will be able to get satisfaction, unless your complaint is very fully justified.

While the Exchange may contemplate giving service to the industry in a general manner, it would necessarily be impossible for it to even attempt to give the service which an individual salesman can give to an individual buyer. That this individual service is appreciated by buyers, is of course a fact, and will in all probability constitute one of the chief reasons why the "Open Exchange" method of selling will never become very popular. "Papers for all purposes" is a slogan which describes clearly the fact, that paper is a product which is put to a great many uses, and consequently must vary according to the purpose for which it is to be used.

That a clever buyer with a thorough knowledge of all kinds of paper, in other words an expert, might possibly buy to slightly better advantage through an Exchange, may be true or may not, because it is possible that with such a knowledge of paper, he would probably know where to go to buy the paper he required to the best advantage. Those without such a knowledge would have to take a chance when making purchases in this manner, no matter how careful they might be.

Question Benefit of Exchange

Finally, at a time when great efforts are being made to place the industry on a sound economic basis by educating paper users to the fact, that the cheapest paper is not always the cheapest in the end, it seems that the opening of an "Open Exchange" will not be beneficial.

Paper should be sold on quality and not price. The "Open Exchange" method of selling, undoubtedly will emphasize the latter, and to my mind will do very little to educate paper buyers to the necessity for carefully investigating the purposes for which the paper is to be used, and then ascertaining the correct grade of paper to buy. It seems therefore, that the "Open Exchange" method can never supplant the "Individual Service Method," at any rate in the pulp and paper industry.

Government Bids and Awards

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., Sept. 12, 1923.—Reese & Reese have been awarded the contract by the Government Printing Office for furnishing 800 pounds (100 reams) of 20 x 30, 8 lbs., white tissue paper at $.14375, bids for which were received on July 27.

The C. L. LaBoiteaux Company will furnish 40,000 pounds (28,000 sheets of 24½ x 34, No. 35 box board at $.0335 per pound, bids for which were opened on July 30.

The R. P. Andrews Paper Company will furnish 2,700 pounds of 22 x 28, white railroad board at $.0874 per pound, bids for which were opened on August 3.

Dobler & Mudge will furnish 80,000 pounds (200 rolls) of yellow bristol board in 20 inch. rolls at $.0573 per pound, bids for which were opened on August 10.

The purchasing officer of the Government Printing Office has received the following paper bids:

3,000 lbs. Oiled Manila Tympan Paper, 24 x 36, 86 lbs. 38-inch rolls: T. A. Cantwell & Co., at $.0893 per lb.; Maurice O'Meara Company, $.0936; The Broderick Paper Company, $.0895; The Whitaker Paper Company, $.0938; Dobler & Mudge, $.095; Mathers-Lamm Paper Company, $.089; Great Notch Paper Company, $.10.

Bids will be opened on September 11 for 35,700 lbs. (350 reams) of 21 x 31 Bristol Board, 102 lbs.

The Government Printing Office will receive bids on September 14 for 500,000 lbs. of white news print paper in 48-inch rolls. Bids will also be received by the printing office on September 17 for 10,000 sheets of mourning paper, 5,000 mourning envelopes and 5,000 mourning stock cards.

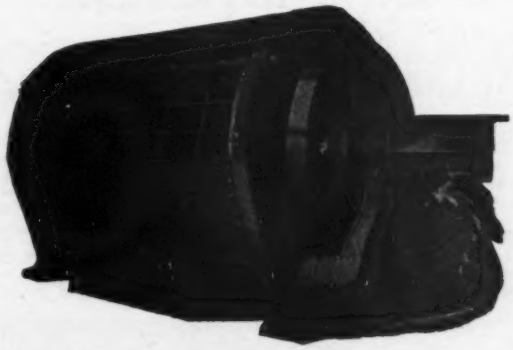
Agents
SUNDS AKTIEBOLAG
STRONG SULPHITE
indirect cooking

PERKINS-GOODWIN CO.
NEW YORK
PULP and PAPER

Agents A/S Toten Cellulosefabrik
BLEACHED SULPHITE
AGENTS GULSKOGEN
CELLULOSEFABRIK
EASY BLEACHING
SULPHITE

"IMPCO" TAILING SCREENER
FOR SCREENING GROUND WOOD TAILINGS

Very Low
Power
and
Upkeep Expense



Delivers
Rejections Free
from Good
Stock

ANOTHER UNIT OF OUR CLOSED SYSTEM FOR PULP SCREENING
WRITE FOR FULL DETAILS *CORRESPONDENCE A PLEASURE*

IMPROVED PAPER MACHINERY CO. Nashua, N. H.
SHERBROOKE MACHINERY CO., LIMITED, SHERBROOKE, CANADA

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING SEPTEMBER 1, 1923

SUMMARY

News print.....2,932 rolls, 310 bls.
Printing paper.....401 cs., 127 bls.
Cigarette paper.....2,945 cs.
Filter paper.....60 bls., 93 cs.
Drawing paper.....55 cs.
Colored.....44 cs., 78 rolls
Writing paper.....67 cs.
Wall paper.....51 cs., 5 pkgs., 4 bls.
Hangings.....43 bls., 19 cs., 536 rolls
Surface coated paper.....47 cs.
Photo paper.....77 cs.
Copy paper.....9 cs.
Tissue paper.....46 cs.
Kraft paper.....486 bls., 1,683 rolls
Wrapping paper.....827 bls., 2,518 rolls, 135 cs.
Packing paper.....1,675 bls., 1,617 rolls, 2 cs.
Parchment paper.....9 cs., 3 rolls
Gummed paper.....1 cs.
Basic paper.....61 cs.
Metal paper.....39 cs.
Miscellaneous paper,
101 bdls., 7,278 rolls, 2,036 bls., 797 cs.

CIGARETTE PAPER

Miguel, Costas & Miguel, Skipsea, Barcelona, 16 cs.
P. J. Schweitzer, Naperian, Antwerp, 78 cs.
P. J. Schweitzer, Belgenland, Antwerp, 27 cs.
P. J. Schweitzer, Zeeland, Antwerp, 25 cs.
British-American Tobacco Company, La Savoie, Havre, 40 cs.
Zarro Tobacco Company, Asia, Lisbon, 24 cs.
Rose & Frank, Waukegan, Havre, 80 cs.
Liggett & Myers Tobacco Company, Paris, Havre, 16 cs.
The Surbrug Company, by same, 22 cs.
American Tobacco Company, Collamer, Bordeaux, 1,450 cs.
De Manduit Paper Corporation, Collamer, St. Nazaire, 273 cs.
R. J. Reynolds Tobacco Company, by same, 920 cs.

FILTER PAPER

Orbis Products Trading Company, Collamer, Bordeaux, 15 bls.
H. Reeve Angel Company, Inc., Minnewaska, London, 9 cs.
E. Fourgera & Co., Olympic, Bordeaux, 73 cs.
American Express Company, President Garfield, London, 45 bls.
American Express Company, Ryndam, Rotterdam, 3 cs.
E. H. Sergeant & Co., Drottningholm, Gothenburg, 1 cs.
H. Reeve Angel & Co., Inc., Berengaria, Liverpool, 9 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Minnewaska, London, 1 cs.
Keuffel & Esser, Celtic, Liverpool, 9 cs.
E. Dietzgen & Co., Mar Adriatico, Hamburg, 45 cs.

COLORED PAPER

E. Dietzgen & Co., Mar Adriatico, Hamburg, 32 cs.
Irving Bank Col. Trust Company, Naperian, Antwerp, 78 rolls.
Borden Riley Paper Company, Belgenland, Antwerp, 12 cs.

WRITING PAPER

F. L. Kraemar & Co., Minnewaska, London, 20 cs.
Publicity Paper Corporation, Ohio, Hamburg, 3 cs.
American Express Company, La Savoie, Havre, 8 cs.
F. C. Strype, Asia, Marseilles, 22 cs.
E. Dietzgen & Co., by same, 16 cs.

WALL PAPER

A. Murphy & Co., Resolute, Hamburg, 8 cs.
Paper Utilities Company, Drottningholm, Gothenburg, 1 cs.
A. C. Dodman, Jr., Belgenland, Antwerp, 4 cs.
A. Murphy & Co., Thuringia, Hamburg, 3 cs.
P. H. Petry & Co., by same, 4 cs.
R. F. Downing & Co., May. Maru, Yokohama, 29 cs.
W. H. S. Lloyd & Co., Celtic, Liverpool, 5 pkgs.
A. C. Dodman, Jr., Olympic, London, 1 bl., 1 cs.
A. Murphy & Co., Hansa, Hamburg, 1 cs., 3 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Minnewaska, London, 16 bls., 7 cs.
W. H. S. Lloyd & Co., Saxonia, London, 5 cs., 17 bls.
A. Murphy & Co., Olympic, London, 1 bl.
W. H. S Lloyd & Co., President Garfield, London, 19 bls., 7 cs.
C. G. Keferstein, Orduna, Hamburg, 424 rolls.
International Acceptance Bank, by same, 112 rolls.

SURFACE COATED PAPER

Genaert Company of America, Naperian, Antwerp, 18 cs.
Genaert Company of America, Belgenland, Antwerp, 8 cs.
Genaert Company of America, Zeeland, Antwerp, 21 cs.

PHOTO PAPER

Genaert Company of America, Naperian, Antwerp, 77 cs.

COPY PAPER

Japan Paper Company, May. Maru, Yokohama, 9 cs.

TISSUE PAPER

Iwai & Co., May. Maru, Kobe, 14 cs.
Iwai & Co., Shunko Maru, Kobe, 8 cs.
F. C. Strype, Carmania, Liverpool, 8 cs.
Meadows, Wye & Co., Celtic, Liverpool, 10 cs.
Meadows, Wye & Co., Baltic, Liverpool, 6 cs.

KRAFT PAPER

Wilkinson Brothers & Co., Inc., Ohio, Hamburg, 323 bls., 26 rolls.
Republic Bag & Paper Company, by same, 745 rolls.
Chemical National Bank, by same, 216 rolls.
International Acceptance Bank, by same, 33 bls.
M. O'Meara Company, by same, 6 bls., 140 rolls.
W. Hartmann & Co., Finland, Hamburg, 110 rolls.
J. P. Heferman Paper Company, Orduna, Hamburg, 63 bls.
W. H. Hartmann & Co, by same, 161 bls., 212 rolls.
Chatham Phœnix National Bank, Drottningholm, Gothenburg, 234 rolls.

WRAPPING PAPER

Chatham Phoenix National Bank, Drottningholm, Gotherburg, 148 bls.
C. K. MacAlpine & Co., Resolute, Hamburg, 36 bls., 2,438 rolls.
Bernard, Judae & Co, Ryndam, Rotterdam, 12 bls.
F. C. Strype, Caledonier, Antwerp, 400 bls.
E. Dietzgen & Co., Mar Adriatico, Hamburg, 5 cs.
Falsing Paper Company, Tyrrhenia, Hamburg, 127 cs.
F. B. Vandegrift & Co., by same, 105 bls.
Roberts, Cushman & Co., C. Verde, Genoa, 3 cs.
Chemical National Bank, Ohio, Hamburg, 80 rolls, 127 bls.

PACKING PAPER

J. P. Heferman Paper Company, Hansa, Hamburg, 463 bls.
National City Bank, by same, 602 bls.
Republic Bag & Paper Company, by same, 42 rolls.
Bernard, Judae & Co., Tyrrhenia, Hamburg, 28 bls.
Wilkinson Brothers & Co., Teresa, Trieste, 1,538 rolls.
Mishell & Williams, by same, 10 rolls, 110 bls.
Poland Paper Company, by same, 126 bls.
Republic Bag & Paper Company, Thuringia, Hamburg, 27 rolls.
Genaert Company of America, Belgenland, Antwerp, 2 cs.
Republic Bag & Paper Company, M. Washington, Trieste, 346 bls.

NEWS PRINT

R. F. Hammond, Inc., Finland, Gothenburg, 371 rolls.
Parsons & Whittemore, Pr. Roosevelt, Bremen, 510 rolls, 93 bls.
M. O'Meara Company, by same, 20 rolls.
Chemical National Bank, Orduna, Hamburg, 1,016 rolls.
M. O'Meara Company, M. Washington, Trieste, 217 bls.
Chemical National Bank, Ohio, Hamburg, 842 rolls.
M. Gottesman & Co., Inc., Topdalsfjord, Bergen, 173 rolls.

PRINTING PAPER

Perry, Ryer & Co., Cameronia, Glasgow, 60 cs.
P. C. Zuhlke, by same, 11 cs.
Wilkinson Brothers & Co., Inc., Ohio, Hamburg, 127 cs.
Wilkinson Brothers & Co., Inc., Zeeland, Antwerp, 21 bls.
B. F. Drakenfeld & Co., Baltic, Liverpool, 20 cs.
B. F. Drakenfeld & Co., Carmania, Liverpool, 16 cs.
Oxford University Press, by same, 10 cs.
Perry, Ryer & Co., Columbia, Glasgow, 89 cs.
P. Puttmann, Belgenland, Antwerp, 15 cs.
E. Dietzgen & Co., Mar Adriatico, Hamburg, 53 cs.
Chemical National Bank, Orduna, Hamburg, 148 rolls.
C. K. MacAlpine & Co., Ryndam, Rotterdam, 106 bls.

PARCHMENT PAPER

Irving Bank Col. Trust Company, Naperian, Antwerp, 9 cs., 3 rolls.

GUMMED PAPER

McLaurin Jones Company, Columbia, Glasgow, 1 cs.

BASIC PAPER

Union Trust Company, Belgenland, Antwerp, 26 cs.
L. Dejonge & Co., by same, 24 cs.
Union Trust Company, Zeeland, Antwerp, 21 cs.

METAL PAPER

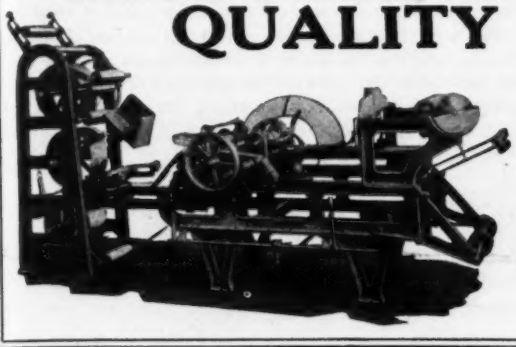
Hensel, Bruckman & Lorbacher, Thuringia, Hamburg, 14 cs.
Hensel, Bruckman & Lorbacher, Finland, Hamburg, 15 cs.

PAPER

D. S. Walton & Co., Hjelmaren, Domsjo, 101 bdls., 3,951 rolls.
Melby, Kutroff & Co., by same, 2,235 rolls.
Blauvelt Wiley Paper Company, Cameronia, Glasgow, 26 bls.
Wilkinson Brothers & Co., Inc., Ohio, Hamburg, 205 bls.
J. P. Heferman Paper Company, by same, 31 bls.
M. O'Meara Company, by same, 580 bls.
Republic Bag & Paper Company, by same, 99 rolls.
M. G. Lange & Co., N. Amsterdam, Rotterdam, 200 cs.
C. B. Richard & Co., Paris, Havre, 16 cs.
Gunboit, Freres Company, by same, 7 cs.
Erstein & Co., by same, 2 cs.
Blauvelt Wiley Paper Company, Hansa, Hamburg, 48 rolls.
Lithoprint Company, Zeeland, Antwerp, 3 cs.
Gimbel Brothers, Suffren, Havre, 6 cs.
Japan Paper Company, Diomed, Hongkong, 8 cs.
Fernstrom Paper Company, H. Olov, Copenhagen, 539 bls.
Bendix Paper Company, Finland, Hamburg, 14 cs.
Japan Paper Company, R. M. Crisina, Barcelona, 3 cs.
De Piccioto Company, La Savoie, Havre, 12 cs.
M. O'Meara Company, Thuringia, Hamburg, 10 cs.
Japan Paper Company, May. Maru, Yokohama, 17 cs.
F. L. Kramer & Co., Pr. Garfield, London, 3 cs.
M. Schneider, Mar. Adriatico, Hamburg, 2 cs.

(Continued on page 66)

QUALITY *plus* PRODUCTION



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The Superintendent of a large bag plant, unsolicited, writes: "All the machines used by this Company have been furnished by you. During my fifteen years in the bag line I have used your machines, and consider them the best square and flat bag machines on the market. I see no reason why the bag manufacturers should not be satisfied with your machines. The design of the Fischer machines and workmanship are A No. 1."
Let us quote you on your requirements of flat and square, as well as satchel bottom machines for making 1/16, ⅛ and ¼ barrel sizes.

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HAFSLUND NORWAY

"HAFSLUND BEAR"
Bleached Sulphite

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"FORSHAGA"
Bleached Sulphite

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"KLARAFORS"
Easy Bleaching Sulphite

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SMALL PAPER ROLLS

OF EVERY DESCRIPTION

ADDING MACHINE ROLLS, CASH REGISTER ROLLS, TICKER TAPE, CLOCK ROLLS, BLASTING, DIE WIPING, TIRE WRAP, BED WRAP, BACKING PAPER, MAILING MACHINE ROLLS

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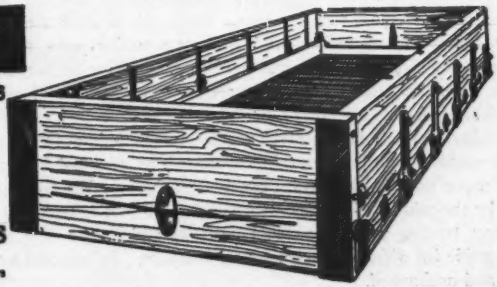

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, SEPTEMBER 12, 1923.

The revival in the paper industry which set in immediately after Labor Day continued unabated during the past week, with prices showing a tendency to stiffen and the demand getting brisker by the day. It is doubtful whether the peak will be reached, however, before another month or six weeks, and members of the trade are expecting an exceedingly prosperous winter.

Although there has been no definite change in the fine paper market during the past week there are indications that there will be before many more days are passed. Things have improved somewhat and inquiries are rolling in to dealers in increasingly large numbers.

Prices continue to hold at the same level in the book paper market as they have for the past eight months, and while a firmer note is evident in the market there are no changes contemplated at the present time. Export trade is evincing signs of picking up, and there is a growing interest in American book paper from other countries in the Western Hemisphere. European countries are still holding off.

The board demand was reported as fair by jobbers and manufacturers around New York last week. While the demand for all grades of board is delayed somewhat, it is reported that healthy orders are popping up here and there in the market, and in another week the demand is expected to be even better than it now is because all lines of industry using boxes, both corrugated and stiff boxes, are reported to be picking up. A number of buyers are now in the market as present prices are considered attractive, and are reported to be making good purchases. While many of the manufacturers and jobbers of board around the city do not believe that the fall will witness a runaway market they nevertheless believe that prices will stiffen considerably during the coming weeks and on a rising market buyers are expected to be plentiful during coming weeks.

The tissue market in the city is in good condition with an upward tendency in prices. A good many future orders are being placed and the tendency is for prices to stiffen rather than to go downward. Production has been slightly curtailed in some places because of low water conditions at the mills, but on the whole the industry feels that it can look for as good a business within the coming weeks as it has had during the present fiscal year.

The demand for news print was reported as excellent for this time of the year with the possible exception of side runs which, although better than they were, still lag behind rolls and sheets. Now that Labor Day, which usually marks the return of activity after the dull summer months, is past, the news print market is growing steadily better. Prices continue strong and unchanged, and are expected to remain at present levels in the spot market for some little time. A good deal of discussion was heard in the trade last week on the final definition of standard news print by Secretary Mellon. To the home manufacturers it means that practically all foreign news print will enter the country duty free except for a few heavy grades, like rotogravure. The importers and mill agents for foreign mills, however, expressed themselves as satisfied with the definition and stated that they now know where they are at which they did not know before, and shipments which were held up at various points pending the final definition will now be forwarded to their destination, so that they expressed themselves as pleased with the definition.

Gradual growth in business, which is expected to attain proportions equal to that of the spring months, was reported in the wrapping paper market last week. Experts in that market last week feel that by the middle of this month business will be where it was before summer trading set in if present inquiries and orders may be taken as a guide by which to gauge future business. Prices continue very firm and unchanged.

Mechanical Pulp

Owing to extreme low water conditions the grinding mills have had to shut down in many places, and this is causing a shortage of mechanical pulp in some quarters. Only rain can alter the situation, and meanwhile the price of ground wood is going upward. There appears to be no real scarcity as yet, but dealers are a little anxious about the prospects for the future if there is not some relief soon.

Chemical Pulp

Chemical pulp has been in much better demand during the week, and prices are showing an upward tendency in this market. Foreign pulp is in better demand, too, and dealers say that they will do a better business this year than they have in a long time.

Old Rope and Bagging

Old rope is showing some improvement now also, and dealers say that things are looking toward betterment. Consumers are showing a great deal more interest as is evinced by a great number of inquiries that are coming in, and a few fat orders have gone through the market. The same is true of bagging, which in some grades is really going with a degree of briskness.

Rags

Foreign and domestic rags are both picking up in demand. Prices are at about the same level, and there is little to indicate an immediate change, although when any does come it is believed that quotations will go higher.

Waste Paper

The waste paper market is in excellent condition with a rising demand and prices stiffening. The board mills seem to be interested in futures, although at the present time they are not running quite as well as manufacturers would wish. In shavings trading is particularly good, and dealers say that there is no sign of any slackening in the generally good business they are enjoying.

What Champion Fibre Company is Doing

ARE YOU?

Are you the best-fitted man for the next higher job?

Are you doing all you can to prepare yourself for that better position?

Are you aware that more than a hundred men in the plant attended vocational classes last spring to improve themselves in their present work and to fit themselves for better jobs? Were you one of them?

Are you not going to join one of the following classes which start during the week of Monday, September 17 and will continue until Friday, March 28, with a two weeks vacation at Christmas time. They cost you only your time and interest.

Blue Print Reading and Shop Sketching
Carpentry
Commercial Law
Lubrication
Machine Shop Practice
Masonry
Multiple Effect Evaporation
Paper Making
Pipe Fitting
Power Plant Practice
Sulphate and Soda Pulp
Sulphite Pulp
Shop Arithmetic (including reading, writing and spelling). (Join this course at any time, the sooner the better.)

Talk it over with your Foreman, your Superintendent or our Educational Director or just tell your Foreman what class you want to attend.

—*The Log.*

Market Quotations

Paper Stock Securities

New York Stock Exchange closing quotations September 11, 1923.

	BID	ASKED
American Writing Paper Company, pref.	8½	9
International Paper Company, com.	35	36
International Paper Company, pref. stamped	64	65
Union Bag & Paper Corporation	61	65

Paper

F. o. b. Mill		
Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@30.00
Superfine	14.00	@30.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—f. o. b. Mill—		
Rolls, contract	3.75	@ 4.00
Rolls, transit	4.00	@ 4.25
Sheets	4.25	@ 4.50
Side runs	3.50	@ 4.15
Book, Cased—f. o. b. Mill—		
S. & S. C.	7.25	@ 9.00
M. F.	7.00	@ 8.75
Coated and Enamel	9.00	@14.00
Lithograph	9.00	@14.00
Tissues—f. o. b. Mill—		
White No. 1	.80	@ .90
White No. 2	.85	@ .95
Colored	1.15	@ 2.00
Anti-Tarnish	1.50	@ 2.00
Kraft	.95	@ 1.15
Manila	.78	@ .85
Kraft—f. o. b. Mill—		
No. 1 Domestic	6.50	@ 7.50
No. 2 Domestic	6.00	@ 6.50
Imported	6.50	@ 7.00
Screenings	3.25	@ 3.50
Manila—		
No. 1 Jute	8.50	@ 9.00
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.50
No. 2 Wood	4.00	@ 4.50
Butchers	4.25	@ 4.75
Fibre Papers—		
No. 1 Fibre	6.00	@ 6.25
No. 2 Fibre	5.25	@ 5.50
Common Bogus	3.50	@ —
Card Middies	4.00	@ 5.00
Boards—per ton—		
News	60.00	@65.00
Straw	61.00	@63.00
Chip	57.50	@60.00
Binders' Boards	75.00	@80.00
Sgl. Mla. Ll. Chip	74.00	@80.00
Wood Pulp	70.00	@75.00
Container	70.00	@80.00
Sulphate Screenings—		
Coarse	.80	@ .90
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	15.00	@16.00
Bleached, basis 20 lbs.	17.00	@18.00
Papermakers' Felts per ton—		
Dry	75.00	@85.00
Saturated	65.00	@75.00
Sheathing Paper, per ton—		
Rosin Sized (red and gray, 30 lbs. per 500 sq. ft.)	55.00	@65.00

Mechanical Pulp

(Ex-Dock)		
No. 1 Imported	45.00	@55.00
(F. o. b. Mill)		
No. 1 Domestic	44.00	@50.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)		
Sulphite (Imported)—		
Bleached	4.50	@ 5.00
Easy Bleaching	3.50	@ 3.75
No. 1 strong unbleached	3.30	@ 3.50
No. 2 Strong unbleached	2.85	@ 3.10
No. 1 Kraft	3.25	@ 3.40
Sulphate—		
Bleached	4.00	@ 4.15
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	4.30	@ 5.00
Mixed Strings	1.00	@ 1.10
Easy Bleaching Sulphite	3.25	@ 3.50
News Sulphite	3.00	@ 3.25
Mitscherlich	3.20	@ 3.30
Kraft (Domestic)	3.10	@ 3.30
Soda Bleached	4.25	@ 4.35

Domestic Rags

New Prices to Mill, f. o. b. N. Y.		
Shirt Cuttings—		
New White, No.1	12.00	@13.00
New White, No.2	5.75	@ 6.50
Silesias, No. 1	7.00	@ 7.50
New Unbleached	10.50	@11.00
Washables	4.50	@ 4.75
Fancy	5.50	@ 6.00
Cotton—according to Grades—		
Blue Overall	7.25	@ 7.50
New Blue	5.00	@ 5.55
New Black Soft	4.75	@ 5.25
New Light Seconds	2.75	@ 3.00
O. D. Khaki Cuttings	4.25	@ 4.50
Men's Corduroy	3.00	@ 3.50
New Canvas	6.50	@ 7.00
New Black Mixed, Old	2.60	@ 2.80
White, No. 1—		
Repacked	5.50	@ 6.00
Miscellaneous	4.75	@ 5.25
White, No. 2—		
Repacked	3.25	@ 3.75
Miscellaneous	2.75	@ 3.00
St. Soiled, White	1.90	@ 2.10
Thirds and Blues—		
Repacked	2.35	@ 2.60
Miscellaneous	1.90	@ 2.15
Black Stockings	2.75	@ 3.00
Roofing Rags—		
Cloth Strippings	1.10	@ 1.20
No. 1	1.10	@ 1.20
No. 2	1.05	@ 1.15
No. 3	.80	@ .90
No. 4	.80	@ .90
No. 5A	1.00	@ 1.10

Foreign Rags

New Light Silesias	6.00	@ 7.00
Light Flannelettes	8.00	@ —
Unbl'chd Cottons	7.50	@ 8.50
New White Cuttings	9.50	@10.50
New Light Oxfords	6.00	@ 7.25
New Light Prints	4.50	@ 6.00
New Mixed Cuttings	2.00	@ 2.50
New Dark Cuttings	1.90	@ 2.10
No. 1 White Linens	10.00	nominal
No. 2 White Linens	6.50	nominal
No. 3 White Linens	5.00	nominal
No. 4 White Linens	3.50	nominal
Old Extra Light Prints	2.00	nominal
Ord. Light Prints	1.75	nominal
Med. Light Prints	1.50	nominal
Dutch Blue Cotton	1.85	@ 2.15
German Blue Cottons	1.50	@ 1.65
Ger. Blue Linens	3.00	@ 3.25
Checks and Blues	1.25	@ 1.50
Dark Cottons	1.30	@ 1.35
Shoppery	1.00	@ 1.05
French Blues	1.75	@ 2.00

Bagging

Prices to Mill F. o. b. N. Y.		
Gunny No. 1—		
Foreign	1.20	@ 1.25
Domestic	1.30	@ 1.35
Wool, Tares, light	1.30	@ 1.40
Wool, Tares, heavy	1.30	@ 1.40
Bright Bagging	1.05	@ 1.20
Sound Bagging	.85	@ .95
Manila Rope—		
Foreign	4.75	@ 5.25
Domestic	4.50	@ 5.00
New Bu. Cut	2.15	@ 2.25
Hessian Jute Threads—		
Foreign	2.00	@ 2.25
Domestic	2.00	@ 2.10
Strong unbl'chd	3.10	@ 3.30

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.32	@ .36
No. 2	.29	@ .31
No. 3	.34	@ .36
India, No. 6 basis—		
Light	.17	@ .18
Dark	.16	@ .17
B. C., 18 basis	.41	@ .42
A. B. Italian, 18 Basis	.51	@ .61
Finished Jute—		
Dark, 18 basis	.29	@ .30
Light, 18 basis	.26	@ .27
Jute Wrapping, 3-6 Ply—		
No. 1	.20	@ .23
No. 2	.18	@ .20
Tube Rope—		
4-ply and larger	.15	@ .17
Fine Tube Yarn—		
5-ply and larger	.19	@ .21
4-ply	.20	@ .22
3-ply	.20	@ .22
Unfinished India—		
Basis	.16	@ .17
Paper Makers' Twine		
Balls	.09	@ .11
Box Twine, 2-3 ply	.14	@ .15
Jute Rope	.15	@ .16
Amer. Hemp, 6	.30	@ .32
Sisal Hay Rope—		
Fancy	.14	@ .16
No. 1 Basis	.14	@ .16
No. 2 Basis	.10	@ .12
Sisal Lath Yarn—		
No. 1	.14	@ .15
No. 2	.11	@ .13
Manila Rope	.18	@ .19

Old Waste Papers

(F. o. b. New York.)		
Shavings—		
Hard, White, No. 1	4.20	@ 4.35
Hard, White, No. 2	3.40	@ 3.50
Soft, White, No. 1	3.30	@ 3.50
Flat Stock—		
Stitchless	1.95	@ 2.05
Over Issue Mag.	1.95	@ 2.05
Solid Flat Book	1.75	@ 2.00
Crumbled No. 1	1.50	@ 1.60
Solid Book Ledger	2.00	@ 2.10
Ledger Stock	1.70	@ 1.80
New B. B. Chips	.75	@ .85
Manilas—		
New Env. Cut	2.35	@ 2.60
New Cut No. 1	1.75	@ 2.00
Extra No. 1 old	1.55	@ 1.65
Print	1.00	@ 1.10
Container Board	.85	@ .95
Bogus Wrapper	.85	@ .90
Old Krafts, machine compressed Bales	1.95	@ 2.10
News—		
No. 1 White News	2.00	@ 2.10
Strictly overissue	1.10	@ 1.25
Strictly Folded	1.05	@ 1.15
No. 1 Mixed Paper	.90	@ 1.00
Common Paper	.60	@ .70

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

F. o. b. Mill		
All Rag Bond	35	@ 40
No. 1 Rag Bond	30	@ 25
No. 2 Rag Bond	15	@ 25
Water Marked Sulphite	10	@ 14
Sulphite Bond	8¼	@ 12
Sulphite Ledger	9½	@ 14
Superfine Writing	18	@ 24
No. 1 Fine Writing	14	@ 22
No. 2 Fine Writing	12	@ 20
No. 3 Fine Writing	9	@ 12
No. 1 M. F. Book	6¼	@ 7
No. 1 S. & S. C. Book	6¾	@ 7½
Coated Book	8¾	@ 10¼
Coated Label	8½	@ 10
News—Rolls, mill	3½	@ 4½
News—Sheets, mill	4¼	@ 4¾
No. 1 Manila	4¾	@ 6
No. 1 Fibre	5¼	@ 5¾
No. 2 Manila	4½	@ 5
Butchers' Manila	4	@ 4½
No. 1 Kraft	7	@ 7½
No. 2 Kraft	6½	@ 7
Wood Tag Boards	5	@ 6
Screenings	5	@ 5½
Boards, per ton—		
Plain Chip	50.00	@52.50
Solid News	54.00	@56.50
Manila Lined Chip	67.00	@70.00
Container Lined—		
85 Test	70.00	@75.00
100 Test	75.00	@80.00

Old Papers

F. o. b. Chicago		
Shavings—		
No. 1 Hard White	4.00	@ 4.15
No. 1 Soft Shav.	3.50	@ 3.65
No. 1 Mixed	1.70	@ 1.85
No. 2 Mixed	1.50	@ 1.60
White Envel. Cuttings	4.00	@ 4.15
Ledgers and Writings	2.40	@ 2.50
Solid Books	2.40	@ 2.50
No. 1 Books, Light	1.75	@ 1.85
Blanks	2.40	@ 2.50
Ex. No. 1 Manila	2.25	@ 2.50
Manila Envelope Cuttings	2.50	@ 2.60
No. 1 Manilas	1.60	@ 1.70
Folders News (over issue)	1.25	@ 1.35
Old Newspaper	1.10	@ 1.15
Mixed Papers	1.10	@ 1.15
Straw Clippings	1.10	@ 1.15
Binders' Clippings	1.00	@ 1.10
Kraft	2.40	@ 2.50
New Kraft Cuts	2.50	@ 2.60
Roofing Stock, f. o. b. Chicago, Net Cash—		
No. 1	32.00	@ —
No. 2	30.00	@ —
No. 3	28.00	@ —
No. 4	28.00	@ —

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Bonds	.10	@ .60
Ledgers	.15	@ .40
Writings—		
Superfine	.15	@ .20
Extra fine	.12	@ .22
Fine	.20	@ .30
Fine, No. 2	.20	@ .25
Fine, No. 3	.15	@ .20
Book, M. F.	.06	@ .11
Book, S. S. & C.	.08	@ .15
Book, Coated	.08	@ .15
Coated Lithograph	.10	@ .15
Label	.08	@ .15
News	.05	@ .07
No. 1 Jute Manila	.12	@ .13
Manila Sul., No. 1	.08	@ .10
Manila No. 2	.07½	@ .08
No. 2 Kraft	—	@ .10
No. 1 Kraft	—	@ .11
Common Bogus	.02½	@ .03
Straw Board	75.00	@85.00
News Board	65.00	@70.00
Chip Board	62.50	@67.00
Wood Pulp Board (Carload Lots)	1.25	@ 1.50
Binder Boards—		
Per ton	75.00	@80.00
Carload lots	75.00	@80.00
Tarred Felts—		
Regular	48.00	@50.00
Slaters	54.00	@56.00
Best Tarred, 1-ply (per roll)	1.35	@ 1.50
Best Tarred, 2-ply (per roll)	1.00	@ 1.15
Best Tarred, 3-ply	1.50	@ 1.65

Bagging

F. o. b. Phila.		
Gunny No. 1—		
Foreign	1.25	@ —
Domestic	1.20	@ 1.25
Manila Rope	5.00	@ 6.25
Sisal Rope	.75	@ .80
Mixed Rope	.75	@ .80
Scrap Burlaps	1.00	@ 1.25
Wool Tares, heavy	2.50	@ 2.75
Mixed Strings	.75	@ .80
No. 1, New Lt. Burlap	1.75	@ 2.00
New Burlap Cuttings	1.75	@ 2.10

Old Papers

F. o. b. Phila.		
Shavings—		
No. 1, Hard White	4.25	@ 4.40
No. 2, Hard White	3.50	@ 3.75
No. 1 Soft White	3.50	@ 3.75
No. 2 Soft White	2.15	@ 2.25

(*Continued on page 68*)

Imports and Exports of Paper and Paper Stock

(*Continued from page 62*)

P. J. Schweitzer, Belgenland, Antwerp, 25 bls.
H. D. Catty, Orduna, Hamburg, 11 cs.
Guaranty Trust Company, by same, 89 rolls.
Wilkinson Brothers & Co., Inc., by same, 127 bls., 450 rolls.
Thomas Barrett Son, Drottningholm, Gothenburg, 57 bls.
M. M. Cohen, by same, 240 bls., 506 rolls.
Mugler & Umlauf, by same, 1,048 rolls, 51 bls.
C. K. MacAlpine & Co., by same, 155 bls.
N. Y. Blue Print Paper Company, Skipsea, Marseilles, 7 cs.
Japan Paper Company, Ryndam, Rotterdam, 16 cs.
C. Steiner, by same, 285 cs.
C. D. Stone, by same, 36 cs.
J. J. Frank, by same, 6 cs.
Hudson Trading Company, by same, 13 cs.
M. Greenbaum, by same, 19 cs.
Import Chemical Company, by same, 31 cs.

RAGS, BAGGINGS, ETC.

L. H. Abenheimer, Skipsea, Barcelona, 401 bls. rags.
Katzenstein & Keene, Inc., by same, 44 bls. baggings, 558 bls. new cuttings.
M. O'Meara Company, by same, 160 bls. paper stock.
Royal Manufacturing Company, by same, 38 bls. cotton waste.
Brown Brothers & Co., California, Glasgow, 49 bls. rags.
E. J. Keller Company, Inc., Mar. Adriatico, Hamburg, 228 bls. rags.
Wilkinson Brothers Company, Inc., by same, 35 bls. rags.
Equitable Trust Company, by same, 79 bls. jute waste.
Katzenstein & Keene, Inc., by same, 165 bls. rags.
Brown Brothers Company, by same, 233 bls. rags.
Bank of America, by same, 80 bls. rag pulp.
Brown Brothers & Co., Columbia, Glasgow, 40 bls. paper stock.
E. J. Keller Company, Inc., Belgenland, Antwerp, 365 bls. flax waste.
Katzenstein & Keene, Inc., Ryndam, Rotterdam, 217 bls. bagging, 403 bls. rags.
M. O'Meara Company, by same, 37 bls. paper stock, 126 bls. bagging.
Chemical National Bank, by same, 528 bls. rags.
Brown Brothers & Co., Wells City, Bristol, 1,226 bls. rags.
International Acceptance Bank, by same, 734 bls. rags.
Ayres, Oddy & Co., Carmania, Liverpool, 12 bls. cotton waste.
Brown Brothers & Co., Waukegan, Havre, 168 bls. rags.
Railway Supply & Manufacturing Company, by same, 29 bls. cotton waste.
E. J. Keller Company, Inc., by same, 169 bls. bagging.
L. H. Abenheimer, Tyrrhenia, Hamburg, 194 bls. rags.
Guaranty Trust Company, by same, 621 bls. rags.
Katzenstein & Keene, Inc., by same, 85 bls. rags.
Katzenstein & Keene, Inc., Yorck, Bremen, 180 bls. rags.
E. J. Keller Company, Inc., United States, Copenhagen, 787 bls. rags.
E. J. Keller Company, Inc., Brasilia, Hamburg, 6 bls. linen threads.
E. J. Keller Company, Inc., Hansa, Hamburg, 100 bls. rag pulp.
E. Butterworth & Co., Inc., Galileo, Hull, 139 bls. bagging, 235 bls. rags.
G. W. Millar & Co., Collamer, St. Nazaire, 302 bls. rags.
Kelly & Co., Westerner, Antwerp, 51 bls. rags.
E. J. Keller Company, Inc., by same, 58 bls. rags.
L. H. Abenheimer, Westerner, Rotterdam, 103 bls. bagging.
Brown Brothers & Co., Cameronia, Glasgow, 57 bls. rags.

OLD ROPE

E. J. Keller Company, Inc., Brasilia, Hamburg, 58 bls.
Brown Brothers & Co., Tyrrhenia, Hamburg, 49 bls. 73 coils.
Brown Brothers & Co., Galileo, Hull, 81 coils.
Brown Brothers & Co., Collamer, St. Nazaire, 94 coils, 7 bls.
Brown Brothers & Co., Waukegan, Havre, 30 coils.
Brown Brothers & Co., Belgenland, Antwerp, 159 coils.
Ellerman, Wilson Company, Pr. Adams, London, 132 coils.
Equitable Trust Company, Ryndam, Rotterdam, 49 coils.
M. Wolfer, Giboney, Havana, 25 bls.
J. C. Van Stallie & Co., N. Amsterdam, Rotterdam, 61 coils.

WOOD PULP

Tidewater Papermills Company, Bornholm, Liverpool, N. S., 12,894 bls. wood pulp.
Tidewater Papermills Company, Barfond, Magdalen River, P. Q., 9,624 bls. wood pulp.
Castle & Overton, Pr. Roosevelt, Bremen, 550 bls., 110 tons wood pulp.
Castle & Overton, N. Amsterdam, Rotterdam, 388 bls. wood pulp.
Pagel, Horton & Co., Inc., Hjelmaren, Domsjo, 4,800 bls. dry sulphate.
J. Andersen & Co., Topdalsfjord, Sarpsborg, 2,250 bls. dry sulphite.
E. M. Sergeant & Co., Topdalsfjord, Kristiania, 1,500 bls dry sulphite.
R. F. Hammond, Inc., by same, 750 bls., 150 tons wood pulp.
M. Gottesman & Co., Inc., by same, 500 bls. wood pulp.
Kidder Peabody Acc. Corp., by same 10,000 bls. moist mechanical pulp.
Kidder, Peabody Acc. Corp., Bergensfjord, Kristiania, 2,000 bls. moist mechanical pulp.

WOOD FLOUR

B. L. Soberski, Topdalsfjord, Fred'stad, 1,500 bags.
B. L. Soberski, Bergensfjord, Fred'stad, 2,250 bags.
Innes, Spieden & Co., Ohio, Hamburg, 983 bags.
Innes, Spieden & Co., Orduna, Hamburg, 305 bags, 17,150 ks.
International Acceptance Bank, Tyrrhenia, Hamburg, 983 bags, 50,000 ks.
Intercontinental Agencies, Mar. Adriatico, Hamburg, 112 bags, 5,040 ks.
The Hansa Company, by same, 249 bags, 10,000 ks.
C. & E. Chapal Freres, Chicago, Havre, 400 bags wood dust.

CHINA CLAY

English China Clays Sales Corp., Wells City, Bristol, 40 casks, 20 tons.

CASEIN

Innes, Spieden & Co., Pan America, B. Aires, 129 bags.
T. M. Duche & Sons, Bonheur, B. Aires, 701 bags.
E. B. Muns, Collamer, St. Nazaire, 290 bags.
Atterbury Brothers, Inc., by same, 201 bags.

NORFOLK

WEEK ENDING SEPTEMBER 1, 1923

Parsons & Whittemore, Brasilia, Hamburg, 436 rolls news print.
Consumers' Paper Company, by same, 20 rolls news print.
American Paper Company, by same, 159 bls. news print.

BALTIMORE IMPORTS

WEEK ENDING SEPTEMBER 1, 1923

Mishell & Williams, West Lashaway, Trieste, 1,115 bls., 362 rolls wrapping paper.
Seaman Paper Company, Brasilia, Hamburg, 807 rolls wrapping paper.
American Woodpulp Corp., by same, 550 bls., 111 tons wood pulp.
J. Anderson & Co., W. Lashaway, Trieste, 780 bls., 155 tons wood pulp.
Becker Woodpulp Company, by same, 918 bls., 93 tons wood pulp.
Becker Woodpulp Company, Teresa, Trieste, 618 bls. wood pulp.
J. Anderson & Co., by same, 858 bls.
Castle & Overton, Breedijk, Rotterdam, 1,019 bls. wood pulp.
M. Gottesman & Co., Inc., Fingal, Storaker, 9,950 bls., 1,990 tons wood pulp.
R. F. Hammond, Inc., Natirar, Harnosand, 1,800 bls., 300 tons wood pulp.
Katzenstein & Keene, Inc., Brasilia, Hamburg, 372 bls. rags.

LOS ANGELES IMPORTS

WEEK ENDING SEPTEMBER 1, 1923

Castle & Overton, Mississippi, Havre, 1,157 bls. rags.

PHILADELPHIA IMPORTS

WEEK ENDING SEPTEMBER 1, 1923

D. L. Ward Company, Naperian, Hamburg, 88 rolls news print.
Chemical National Bank, Naperian, Hamburg, 44 rolls news print.
Public National Bank, by same, 67 bls. print paper.
W. Hartmann & Co., by same, 80 rolls kraft paper.
Enterprise Paper Company, by same, 1,201 rolls paper, 28 bls. paper.
H. L. Kilner Company, Westerner, Antwerp, 5 cs. colored paper.
Castle & Overton, Skiensfjord, Kristiania, 2,000 bls. wood pulp.
Castle & Overton, Stanmore, Dundee, 1,517 bls. waste paper.
Castle & Overton, Westerner, Rotterdam, 179 bls. rags.
Waste Material Trading Corp., by same, 41 bls. rags.
S. Berkenstein Sons', by same, 221 bls. rags.
E. J. Keller Co., Inc., by same, 72 bls. rags.
E. J. Keller Co., Inc., Frode, Copenhagen, 160 bls. rags.
E. J. Keller Co., Inc., Hudson, Bordeaux, 236 bls. rags.
E. J. Keller Co., Inc., Westerner, Antwerp, 500 bls. rags.
Waste Material Trading Corp., by same, 40 bls. rags.
Salomon Bros. & Co., by same, 234 bls. rags.
American Wood Pulp Corp., by same, 98 bls. rags.
Castle & Overton, by same, 984 bls. rags.
Castle & Overton, Collainer, Bordeaux, 568 bls. rags.
Alex Brown, by same, 136 bls. rags.
Waste Material Trading Corp., by same, 162 bls. rags.
Salomon Bros. & Co., Collainer, St. Nazaire, 247 bls. rags.
Castle & Overton, by same, 619 bls. rags.
Katzenstein & Keene, Inc., by same, 328 bls. rags.
Katzenstein & Keene, Inc., Waukegan, Havre, 501 bls. rags.
Waste Material Trading Corp., by same, 397 bls. rags.
American Wood Pulp Corp., Waukegan, Dunkirk, 457 bls. rags.
L. H. Abenheimer, Napenau, Hamburg, 48 bls. rags.
Katzenstein & Keene, Inc., Manchester Importer, Manchester, 148 bls. new cuttings.
Katzenstein & Keene, Inc., Eisenbach, Hamburg, 392 bls. rags.
Castle & Overton, West Inskip, Antwerp, 378 bls. rags.
Castle & Overton, Hudson, Havre, 112 bls. rags.

New York Office
280 Broadway

Dayton Office

Chicago Office
10 So. La Salle St.

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Tear it
Test it
and you will specify it

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THE MINER-EDGAR CO.
110 WILLIAM ST.,
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A Winner in the Parchment 1923 "Home and Garden" Contest

"World's Model Paper Mill" KVP Kalamazoo Vegetable Parchment Co. Kalamazoo, Michigan, U. S. A.

$1000.00

CASH FORFEIT

$1,000.00 cash forfeit that the Stickle system for removing air and condensation from the dryers and automatic regulation of steam for drying will dry more paper evenly with less steam consumed than any equipment manufactured for the same purpose under a competitive test.

STICKLE STEAM SPECIALTIES CO. Indianapolis, Ind.

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, SEPTEMBER 12, 1923.

Chemicals continued to increase in demand with the price becoming more and more firm on most of the grades. It is the general opinion among dealers that the various paper mills have just about used up all of their excess supply, and that they are now coming into the market heavily for fall and winter shipments. It is a little early as yet for the generally good undertone to have communicated itself definitely to the various commodities and consequently there is no real change in the individual articles listed below. That such change will come in the very near future, certainly next week or the one after, is confidently believed by all authorities in the industry. Chemicals are always the first to feel the seasonal depression in the summer and are always the last to recover in the fall. This year has been no exception, and, if anything, the buying is setting in a little sooner than usual.

BLEACHING POWDER.—Fewer distressed lots of bleach are being offered at reduced prices and dealers say that they are disposing of their surplus supplies without much trouble. The price is still from 1.50 to 1.60 cents a pound.

BLANC FIXE.—Demands for blanc fixe are still limited although better than ever before during the past three months. Dealers say that the revival has come, and they are preparing to do a normally good business within the next few weeks. The price is still firm at $30 to $35 a ton on the pulp grade and $80 to $85 a ton on the dry.

CAUSTIC SODA.—Dealers say that the volume of inquiries for caustic has increased and that more orders are being filled. Trading in the open market has become brisker. The price remains at 3.17 to 3.20 cents a pound.

CASEIN.—Casein is still in smaller demand than it should be, but the volume of orders is increasing, and the price is much steadier than it has been in a long time. The price is still at from 15 to 17 cents a pound.

CHLORINE.—Paper mills continued to show little interest in chlorine during the past week, although there has been some improvement. There is enough demand from other industries to keep the price firm at from 4.20 to 4.40 cents a pound in tanks.

ROSIN.—There has been more call for the paper making grades of rosin, and there are many other evidences of a revival in naval stores. The price is a little lower, running from $5.95 to $6.00 for 280 pounds in barrels.

SALTCAKE.—Little change has come in the saltcake market in the week so far as the paper industry is concerned, although the glass and other industries are calling for it in reasonably large lots, thus keeping the price at $22 to $24 a ton.

SODA ASH.—Buying of soda ash has also been rather slow this week just as it has been for a month or so back. Dealers are not worried, however, and report that they are getting ready for a good business they believe is due to arrive by the first of the month.

SULPHATE OF ALUMINA.—Alumina sulphate is in better demand and the price continues firm. Some lots of fair size have passed through the open market, but things are not yet normal. Iron free grade is still at from 2.05 to 2.25 cents a pound and commercial 1.25 to 1.35 cents.

Baumann to Leave Gilman Co.

GILMAN, Vt., September 11, 1923.—Leon F. Baumann, who, for the past six years, has been connected with the Gilman Paper Company of this place as master mechanic of their bay factory, in which capacity he has built all their self-opening bag machinery, has resigned his position, to take effect September 30. His future plans have not been made known.

Market Quotations

(*Continued from page 65*)

No. 1 Mixed	1.60	@	1.75
No. 2 Mixed	1.25	@	1.50
Solid Ledger Stock	2.50	@	2.75
Writing Paper	2.45	@	2.50
No. 1 Books, heavy	2.00	@	2.25
No. 2 Books, light	1.40	@	1.50
No. 1 New Manila	2.75	@	3.00
No. 1 Old Manila	1.75	@	2.00
Container Manila	1.35	@	1.50
Old Kraft	2.25	@	2.50
Overissue News	1.50	@	1.60
Old Newspaper	1.25	@	1.50
No. 1 Mixed Paper	1.00	@	1.10
Common Paper	.80	@	.90
Straw Board, Chip	1.00	@	1.10
Binders Bd., Chip	1.00	@	1.10
Domestic Rags—New. Price to Mill, f. o. b. Phila.			
Shirt Cuttings—			
New White, No. 1	.12	@	.12¼
New White, No. 2	.07	@	—
Silesias, No. 1	.07¼	@	.07½
New Unbleached	.10	@	.11
Washables	.04½	@	—
Fancy	.05¼	@	.05½
Cottons—according to grades—			
Blue Overall	.05½	@	.05¾
New Blue	.02¼	@	.02¾
New Black Soft	.06¼	@	.06½
New Light Seconds	.02⅜	@	.02¼
Khaki Cuttings	.11	@	.04½
Corduroy	.03½	@	.04
New Canvas	.08¼	@	.08¾
New Black Mixed Old	.04	@	—
White, No. 1—			
Repacked	.06	@	.06½
Miscellaneous	.04½	@	.04¾
White, No. 2—			
Repacked	.03½	@	.04
Miscellaneous	.03	@	.03¼
Thirds and Blues—			
Repacked	2.00	@	2.25
Miscellaneous	1.85	@	1.90
Black Stockings	2.75	@	3.00
Roofing Stock—			
No. 1	1.35	@	1.40
No. 2	1.25	@	1.30
No. 3	1.15	@	1.20
No. 4	1.15	@	1.20
No. 5A	1.10	@	—
B			nominal
C			nominal

BOSTON

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Bonds	.09½	@	.63
Ledgers	.09½	@	.55
Writings	.08½	@	.42
Superfine	.16	@	.26
Fine	.15	@	.18
Books, S. & S. C.	.07½	@	.12
Books, M. F.	.07¼	@	.09½
Books, coated	.09	@	.15
Label	.09	@	.13
News, sheets	4.75	@	6.00
News, rolls	4.50	@	5.75
Manilas—			
No. 1 Manila	6.00	@	7.00
No. 1 Fiber	.06½	@	.07
No. 1 Jute	9.00	@	10.50
Kraft Wrapping	.07	@	—
Common Bogus	3.50	@	3.85

Boards

(Per Ton Destination)

Chip	$60.00	@	62.50
News, Vat Lined	60.00	@	62.50
Wood, Vat Lined	70.00	@	72.50
Filled News Board	60.00	@	65.00
Solid News Board	75.00	@	80.00
S. Manila Chip	75.00	@	80.00
Pat. Coated	90.00	@	100.00

Old Papers

Shavings—			
No. 1 Hard White	4.00	@	4.15
No. 1 Soft White	3.25	@	3.35
No. 1 Mixed	1.00	@	1.25
Ledgers & Welding	2.25	@	—
Solid Books	2.00	@	2.10
Blanks	2.10	@	2.15
No. 2 Light Books	1.50	@	—
Folded News, overissues	1.00	@	1.10
Gunny Bagging	1.00	@	1.10
Manila Rope	5.00	@	5.25
Mixed paper	.85	@	.95
Old News	1.90	@	2.00
Old Kraft	2.00	@	2.10
No. 1 Scrap Burlap	.80	@	1.00
No. 2 Roofing Bagging	.60	@	.70
Mixed Strings	.90	@	1.00
No. 1 Roofing Rags	1.50	@	—

TORONTO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11	@	.12½
Light tinted	.12	@	.13½
Dark Tinted	.13½	@	.15
Ledgers (sulphite)	—	@	.13
Writing	.09½	@	.12
News, f. o. b. Mills—			
Rolls (carloads)	3.75	@	—
Sheets (carloads)	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	9.00	@	—
No. 2 M. F. (carloads)	8.00	@	—
No. 3 M. F. (carloads)	7.50	@	—
No. 1 S. C. (carloads)	9.50	@	—
No. 2 S. C. (carloads)	8.50	@	—
No. 1 Coated and litho	14.00	@	—
No. 2 Coated and litho	13.00	@	—
No. 3 Coated and litho	12.25	@	—
Coated and litho., colored	14.25	@	—
Wrapping—			
Grey	5.00	@	—
White Wrap	5.75	@	—
"B" Manila	6.00	@	—
No. 1 Manila	7.25	@	—
Fiber	7.25	@	—
Kraft, M. F.	8.00	@	—
M. G.	8.15	@	—

Pulp

(F. o. b. Mill)

Ground wood	$42.00	@	45.00
Sulphite easy bleaching	60.00	@	70.00
Sulphite news grade	55.00	@	65.00
Sulphite, bleached	85.00	@	90.00
Sulphate	70.00	@	72.50

Old Waste Papers

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	3.65	@	—
Soft White Book shavings	3.30	@	—
White Blk. News	1.80	@	2.00
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.30	@	1.85
Light and Crumpled Book Stock	1.15	@	1.70
Ledgers and Writings	1.85	@	2.25
Solid Ledgers	2.00	@	—
Manilas—			
New Manila Cut	1.90	@	2.00
Printed Manilas	1.55	@	—
Kraft	2.25	@	2.50
News and Scrap—			
Strictly Overissue	1.00	@	1.25
Folded News	1.00	@	—
No. 1 Mixed Papers	.85	@	1.10
Domestic Rags—			
Price to mills, f. o. b. Toronto			Per lb.
No. 1 White shirt cuttings	.12	@	.12¼
No. 2 White shirt cuttings	.06	@	—
Fancy shirt cuttings	.05½	@	.06
No. 1 Old Whites	.04½	@	—
Third and blues	.02¼	@	.02½
			Per cwt.
Black stockings	.03	@	—
Roofing stock:			
No. 1	—	@	—
No. 2	—	@	—
Manila rope	.05½	@	.06
No. 2	1.55	@	—
Gunny Bagging	.01½	@	—